

Risk management in a globalizing world.

An empirical analysis of individual preferences in 26 European countries

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ABSTRACT

The risks that people face in everyday life, such as illness and unemployment, can be covered through the market, the government or the community consisting of informal relationships. The market can function with the lowest level of solidarity compared to the other two mechanisms, the government mechanism requires the highest level of compulsory solidarity and communities are associated with voluntary solidarity. Their social context affects people's preference for one of the mechanisms. This article investigates to what extent these preferences are influenced by globalization, the economic, social and political openness of countries. The dataset used in this study combines the *European Values Study 1999-2000 (EVS)*, the *International Monetary Fund (IMF)*, and the *KOF Index of Globalization*, containing information about 31,554 people living in 26 European countries. The results from logistic multilevel analysis show that preferences towards the organization of solidarity are related to the different dimensions of globalization.

KEYWORDS

Globalization, openness, solidarity, welfare states, international comparison

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INTRODUCTION

Most studies that aim at explaining attitudes towards the welfare state investigate welfare state support and thus focus on the extent to which people are in favour of certain policies and arrangements. These studies provide valuable information about the public opinion towards the welfare state and the individual and national level factors influencing it (Blomberg and Kroll, 1999; Gevers, Gelissen, Arts and Muffels, 2000; Hasenfeld and Rafferty, 1989; Svallfors, 1997). As this field of research shows, welfare state support can decline or rise for several reasons. If people are less in favour of certain welfare state policies in their country, it is usually interpreted as evidence for declining solidarity within society. Although this may be the case, it is also possible that only a particular kind of solidarity declines, namely the compulsory solidarity organised through the state, whereas people are willing to assist others on a voluntary basis. What is more, it is also possible that a decreasing support for formal solidarity results in decreasing levels of informal solidarity, as is for instance argued in the literature on crowding out effects of welfare states (Van Oorschot and Arts, 2005).

The present article develops a theoretical model for understanding the preferences that people have towards three distinct ways to cover risks, namely (1) the market, requiring the lowest level of solidarity, (2) formal and compulsory solidarity, i.e. the arrangements of the welfare state, and (3) informal and voluntary solidarity associated with social support accessed through social networks, for instance among relatives and friends, which are referred to as community relationships in the remainder of this article. In the theoretical model, people's social context is particularly relevant for their preferences towards these mechanisms for risk management in society. When it comes to

welfare state provision and public support, globalisation is widely regarded as one of the most often relevant developments that societies are experiencing nowadays, affecting the decisions and behaviour of both governments and individuals (De Beer and Koster, 2007; Guillén, 2001). Yet still, despite the research interest, there is an ongoing debate about the exact impact of the openness of countries and the literature offers contrasting opinions concerning the impact of globalisation on the social structure of countries. Whereas it may be expected that globalization decreases the stability of societies and hence decreases public support for welfare arrangements and solidarity, it can also be argued that the weakening of national borders leads to an increased demand for mutual help and provisions providing assistance (Jones and Smith, 2001; Kellner, 2002; Koster, 2007). So far, this question has not been fully answered and this article aims at contributing to the literature by formulating and testing hypotheses about the relation between social context in relation to globalisation and people's preferences for risk management across 26 European countries.

Section 2 discusses the three main mechanisms through which risks can be covered and theorises how the preference that people have for organising their help towards others depends on the social structure in which they are situated. Section 3 deals with the question how the economic, social and political openness of countries may affect these preferences, leading to hypotheses that are empirically investigated in Section 4 using data from the *European Values Study (EVS)*, *International Monetary Fund (IMF)* and the *KOF Index of Globalization*. The article closes with a discussion of these results and their consequences for theoretical and practical debates.

THREE MECHANISM FOR SECURITY

People run several risks in everyday life, such as illness and unemployment, which may be dealt with in several ways. Usually, effective coverage of risks implies that individual contributions are pooled and arrangements are created providing rules that regulate who can make use of these collective means, leading to a system of collection and distribution of resources. The three fundamental means for allocating resources that are distinguished in the literature are termed markets, governments (or bureaucracies) and communities (Bowles and Gintis, 1996). These allocation mechanisms offer different solutions for dealing with risks, as can be illustrated with the following simplified example. When a person gets ill and needs help from others, it is possible that help can be provided through the market if there is a private insurance covering the costs for medical care, it can be provided through the government if there are collective arrangements like social insurances or if the care is provided by the government, and finally this person may receive informal help offered by relatives and friends. The result is the same in all three cases: the sick person gets help, at least in theory; whether someone actually is able to receive help through either of the mechanisms depends on a multitude of additional circumstances that may vary empirically. For the purpose of the model it suffices that the example shows that there are different means through which the same goal can be reached. Nevertheless, besides their similarity, the three mechanisms work in different ways. The market functions through the price mechanism, bringing together demand and supply; the government uses formal rules and control mechanisms; and the community is characterised by informal relations and mutual trust (Bowles and Gintis, 2002). These three mechanisms for allocating resources can be distinguished based on the level and

kind of solidarity they require. Market relations are characterised by the *lowest level of solidarity* compared with the other two mechanisms. Both the provision of help through the government and help through the community require solidarity, but they differ with respect to the kind of solidarity on which they are based. In the first case, a system of *formal and compulsory solidarity* is at work and, in the latter case, it is based on *informal and voluntary solidarity*.

In the literature, especially the area of economic theories of organisation such as the transaction cost approach (Williamson, 1981), the focus is on a dichotomy between the market and bureaucratic arrangements; in the case of risk coverage there is a choice between the price mechanism and formal regulation by the government. For analysing such choices, it is argued that as long as the price mechanism functions well, this will be the most efficient solution, but if the market fails it is more efficient to use bureaucratic arrangements. As such, the notion of market failure is at the heart of economic theories of organisation (Simon, 1991). In principle, everything can be taken care of through the market and there is reason for government intervention only in the case of market failures. As a result, this approach aims at identifying the causes of such failures, which are related to human behaviour and cognition as a certain characteristics of market relationships. It is assumed that people are not perfectly but bounded rational actors that may act opportunistically; they are not able to take all possible actions and their consequences into consideration, and they may take advantage of the situation if the market relation gives them the possibility to do so. Bounded rationality and opportunism do not create market failures as such, but only if certain conditions are present. Market relationships can differ with respect to their complexity, uncertainty and the number of

actors involved. Assuming bounded rationality and opportunism, markets are more likely to fail if the market relationship is more complex, more insecure and fewer actors participate (Williamson, 1975). Applied to the example of medical care, in which it is difficult to get information about other actors, two problems can occur. The first potential problem is that it leads to a process called adverse selection (Akerlof, 1970). The ones who have a lower risk of getting ill are less likely to be willing to pay for insurance if they will not benefit from it. If they do not participate, the costs for insurance will go up because less people are paying for it while more people depend on it and need money to pay their hospital bills. In turn, as the costs increase, it drives out the persons with an average chance of getting ill. Even though they may need the insurance, the costs are too high for them to pay off. In the end, the costs for getting insured are too high for everyone, leading to the situation that no one is willing to get an insurance while at the same time everyone would benefit from it if it were available.

The second problem that may occur if there is an insurance to cover risk is moral hazard (Arrow, 1963). If they know that the risks are covered, people may show different behaviour and it is possible that they may take risky actions or even deceive an insurance company in order to get money (Dornstein, 1996). As a consequence, the costs for insurance rise and people have to pay more, including those who are not more risk seeking than before they were insured. For this latter group of people, it becomes less attractive to pay for the insurance. Again, this starts a process through which people withdraw and the costs for insurance rise. That markets for insurance can fail due to problems of adverse selection and moral hazard has been used as an argument for government intervention to regulate these markets. The most common solution proposed

to these problems is that governments choose to prevent them by the use of a compulsory insurance, limiting people's choices, to make sure that both the good and the bad risks are represented, combined with extensive monitoring and formal sanctions to make sure that everyone contributes and only those people profit who really need it.

The argument outlined above illustrates the dichotomy between market and government solutions that is central to the literature on economic organisation. Markets can be used to cover risks, but government intervention may be more efficient if markets fail. In these approaches, two solutions represent the extremes of a continuum for the allocation of resources. Nevertheless, it is also possible that both markets and governments fail. This is in particular the case if there is more insecurity about the transaction and if the actors have conflicting interests (Ouchi, 1980). Were markets and bureaucracies the only possible mechanisms, then this would imply that no solution could be reached at all. An additional mechanism that can be added to the dichotomy is termed community and may be a means to overcome problems of failing markets and governments. Community relationships are typified by a high level of interdependence among members of a community and the longevity of these relationships. The advantage of communities over market and government solutions is that they contain more accurate information about the behaviours, abilities and needs of the members, increasing possibilities for sustaining norms and the search for efficient solutions that are not undermined by adverse selection and risk-seeking behaviours (Bowles and Gintis, 2002). Although communities and government solutions both require that people are willing to share resources with others, they differ with respect to the kind of solidarity associated with them. In contrast to the compulsory solidarity organised through the government,

community relationships are characterised by voluntary solidarity among the members and usually operates without a formal body collecting taxes and redistributing the revenues.

Which of the three mechanisms is likely to be the most efficient depends on the characteristics of the transaction. In the theoretical literature as well as policy discussions, considerations about the most efficient solution are made top-down. In these instances it is estimated which of the mechanisms will function the best given the complexity, uncertainty and the number of actors involved in the transaction. The present article uses a bottom-up approach to this problem, namely by investigating people's preference for one of the three mechanisms with regard to their willingness to help others. If people are not willing to help others it is assumed that they prefer the market mechanism, and if they do want to help others this can be organised through the government, requiring compulsory solidarity, or the community, based on voluntary solidarity. The preference that people have towards the organisation of solidarity depends on the extent to which they believe that one of the mechanisms will be a good solution. Furthermore, beliefs concerning the mechanisms are assumed to be influenced by the social structure in which they should cover a certain risk. The three mechanisms are related to the level of uncertainty, complexity and the number of people. The market mechanism will be the most efficient solution if the level of uncertainty and complexity is low and many people are involved which is necessary to let the price mechanism do its work and bring supply and demand together. The chance of market failure increases as the uncertainty and complexity within society increases and people will be more willing to let the government take over to come up with solutions that cannot be left to the market. If the

level of uncertainty and complexity moves beyond a certain critical point, people will start to doubt that the government is able to develop efficient solutions and they will be more in favour of creating their own solutions within their community. This latter point involves far less people than in the case of the market and the government mechanism and leads to additional coordination costs. Since communities are relatively small and the members that are part of them are able to monitor each other's behaviours and intentions, norms and sanctions can be developed to sustain solidarity within them to handle these additional costs. Put differently, if one of the modes of risk management fails it may be compensated by one of the other two mechanisms and the chances of success and failure of either of the mechanisms depends on the social context in which they operate.

Furthermore, it should be noted that in practice a combination of the three mechanisms is found, but that one of them gets the most emphasis and is viewed as the most legitimate solution by the general public. Table 1 summarizes these theoretical notions about the three mechanisms for managing risks and the social contact and kind of solidarity associated with each of them.

TABLE 1 ABOUT HERE

THE EFFECTS OF OPENNESS

Globalisation refers to the increasing cross-bordering of the economic, social and political, and the openness of a country indicates the extent to which the country takes part in it (Castells, 1996; Guillén, 2001; De Beer and Koster, 2007; Held, McGrew, Goldblatt and Perraton, 1999; Waters, 1995). The three different kinds of openness at the

national level can influence people's preference for the organisation of solidarity through the effects that they have on the social context of societies.

Economic openness

Economic openness can influence people's preferences as follows. Countries with many international economic relations with other countries are more affected by fluctuations on the world market than are countries that are economically more closed. As a consequence, people living in the economically open countries will suffer the consequences of a crisis on the world market, for instance if such a crisis leads to unemployment. Moreover, the economically open countries face the problem of tax evasion, which means that companies and individuals may move to countries where tax levels are lower (Bowles and Wagman, 1997). Therefore, it is argued that economic openness leads to more *insecurity* and the social norms and social structure necessary to sustain solidarity may be undermined (Blossfeld, Buchholz and Hofäcker, 2006; Rodrik, 1997). A higher level of insecurity either implies that people's risks increase or that the number of people facing a certain risk increases. In both cases, the uncertainty and complexity within countries increases and it becomes more difficult to cover these risks through the market, and it may be questioned whether insurances will be able to cover these risks efficiently. Therefore, economic openness increases the preference for compulsory solidarity provided through the government. The condition that needs to be met is that there is a certain level of solidarity among the citizens of a country since they have to be willing to spend financial resources for these collective arrangements from which they may not benefit themselves. As is shown by research concerning welfare state

support, people will be in favour of collectively organised solidarity if they have the impression that others are not taking advantage of their contributions (Bowles and Gintis, 2000). If the level of insecurity, thanks to more economic openness, increases further, it is possible that people will not put their trust in the government to face these risks and are more inclined to come up with solutions within their own community and thus have a stronger preference for voluntary solidarity. It is hypothesised that: *The preference for voluntary solidarity is stronger in economically open countries because of increased insecurity.* (Hypothesis 1).

Social openness

The effect that social openness has on the preference for solidarity is based on the assumption that the socially open countries have a more *heterogeneous* social structure because of the international flows of information, culture and people. The level of social cohesion may decrease within these countries because of this increased heterogeneity (McPherson, Smith-Lovin and Cook, 2001). Within heterogeneous countries, there is more uncertainty about the behaviours and intentions of fellow citizens and, as risks may also be distributed less homogenous among citizens, societal complexity is higher. This increases the likelihood of market failures. As risks are distributed less equally, a problem with private insurances can occur because chances are higher that people with the lowest risks are less willing to pay for insurance, leaving the people who have a high risk with an insurance that they may not be able to afford. At the same time, the preference for compulsory forms of solidarity can increase because of lower levels of actual and perceived interdependence among people. The expectation is, therefore, that

people are less willing to contribute to collective arrangements such as the welfare state. Increased heterogeneity can thus lead to a higher preference for voluntary solidarity organised through the community. Whereas the heterogeneity of the whole social structure increases, this does not have to be the case for local structures in which people know each other well enough to deal with problems of opportunism. Therefore, the second hypothesis is: *The preference for voluntary solidarity is stronger in socially open countries because of increased heterogeneity.* (Hypothesis 2)

Political openness

Political openness is a consequence of the international political relations among countries and is expected to have less direct effects on the social structure of countries than economic and social openness do. Nevertheless, there may be an indirect effect since political openness can have a *stabilising effect* through the international relations which can prevent the negative effects of insecurity caused by economic openness (Dreher, 2006). Economic openness is especially assumed to negatively affect the welfare state through increased tax competition among countries. Economically open countries face a dilemma in this respect. A country that wants to sustain its welfare state needs to keep tax levels high, but also runs the risk of people and companies moving to other countries with lower tax levels. To remain attractive, countries may lower tax levels, leading to a race to the bottom. International political relations may be used as a means for countries with an extensive welfare state to come to agreement with other countries that are also willing to sustain their welfare state. The establishment of these mutual agreements can put a stop to the race to bottom. If political openness does indeed have such a stabilising effect,

there will be no threat to the level of compulsory solidarity. On the contrary, if countries counter the negative effects of economic openness successfully, it may increase the preference for compulsory solidarity among their citizens. The third hypothesis therefore is: *The preference for compulsory solidarity is stronger in politically open countries because of the stabilising effect of international relations.* (Hypothesis 3)

DATA AND METHOD

Data

Data from different sources are used to test the hypotheses. The willingness to help others and the preference for compulsory and voluntary solidarity are taken from the *European Values Study (EVS)*, a large-scale survey in which people from 32 European countries participated and which was held in 1999 and 2000 (Halman, 2001). This dataset is gathered at the individual level. These data are combined with national level data about openness and the welfare state. The *KOF Index of Globalization* from 2007 provides information about the economic, social and political openness of countries. Data about welfare states are taken from the *International Monetary Fund* (IMF, 2001). Merging these dataset implies that it was not possible to include all EVS countries. The final dataset includes information about 31,554 people in 26 European countries.

Dependent variable: organization of solidarity

The dataset does not include a variable measuring the preferences that people have towards the organisation of solidarity. The variable *organisation of solidarity* is constructed using two variables from the EVS that represent the distinction between no

solidarity, compulsory solidarity, and voluntary solidarity that has been made earlier in this article. The first variable measures whether people are willing to help elderly, the sick and disabled, and immigrants. In the EVS this variable is measured on a five-point scale (1 = absolutely not; 5 = absolutely yes). The people scoring 1 or 2 indicate that they are not willing to help, whereas the ones who filled in 4 or 5 are prepared to assist others. The value of 3 indicates that people may or may not help others, but that they are not sure about it. Since the interest is in those respondents who are certain that they are willing to provide help, the ones who filled in the neutral option are regarded as not prepared to help. Therefore, this variable has been recoded to the two categories “not prepared to help” for the people scoring between 1 and 3 and “prepared to help” for the people scoring 4 and 5. The second variable measures whether people think individuals or governments should take more responsibility, ranging from 1 to 10. This variable is also recoded into two categories, the persons scoring between 1 and 5 indicate that they prefer “individual responsibility” and the ones scoring between 6 and 10 prefer “government intervention”. The variable organisation of solidarity combines these two variables measuring whether people are prepared to help others or not and whether they prefer individual or government responsibility. This variable is constructed for three the groups: elderly, the sick and disabled and immigrants.

Independent variables

Openness

The *KOF Index of Globalisation* includes information about the economic, social and political openness of countries for the period between 1970 and 2004. *Economic*

openness is measured with (1) economic flows through international trade, foreign investments and portfolio investments (all three relative to GDP) and (2) constraints on trade through trade barriers, taxes on imports, taxes on trade and an index of capital control. *Social openness* consists of information about personal contact, information flows and cultural proximity. These sub dimensions are measured with the number of Internet hosts and Internet users, number of people with cable television and the number of radios in a country (all per 1,000 persons), trade in books relative to GDP and the number of McDonalds restaurants and IKEA stores (both relative to the number of citizens in a country). *Political openness* is measured with the number of embassies, membership in international relations and the number of UN peace missions that a country takes part in. Scales for openness are created by transforming the measures to a scale with a minimum value of 1 and a maximum value of 100, which are based on the lowest and the highest scores of a variable between 1970 and 2004. Therefore, the value that a country has on a certain moment is relative to the values of other countries and on other years. The variables are weighted using factor analyses including information from all countries and for all years (Dreher, 2006).

Statistical control variables

The analyses are controlled for a number of variables that may also affect people's preferences for the organisation of solidarity. At the national level, the level of solidarity and the preferences towards organising it can be influenced by the size of the welfare state, indicating the level of compulsory solidarity present in society. *Welfare spending* is measured with social spending as a share of GDP based on the data from the IMF.

Besides that, the analyses control for several individual characteristics. *Religious denomination* is measured with the item: ‘Do you belong to a religious denomination?’ (0 = no; 1 = yes). *Gender* is coded 0 = male and 1 = female. The variable *employed* is measured with the item: ‘Are you yourself employed or not?’ (0 = no; 1 = yes). *Stable relationship* is measured with the item: ‘Whether you are married or not, do you live in a stable relationship with a partner?’ (0 = no; 1 = yes). The *age* of respondents is recoded into three groups: age-low (people younger than 35 years old); age-middle (people between 35 and 65 years old); age-high (people older than 65 years old). *Educational level* is recoded into three groups: low educational level (inadequately completed elementary education, completed elementary education, and elementary education and basic vocational qualification); moderate educational level (secondary intermediate vocational qualification, secondary intermediate general qualification, and full secondary maturity-level certificate); and high educational level (higher education, lower-level tertiary certificate and higher education, and upper-level tertiary certificate). *Town size* is recoded into three groups: small town (under 5,000); medium town (between 5,000 and 100,000); and big town (100,000 and more).

TABLE 2 ABOUT HERE

METHOD

Table 2 provides an overview of the variables used in this study, the level at which they are measured and the data sources from which they are taken. Because of the nature of the data standard regression analysis cannot be applied. First, the dataset includes

information at two different levels. Individual preferences and characteristics are measured at the lowest level and information about the country's openness and the welfare state are measured at the national level. Secondly, the variables used in this study to investigate people's preferences are categorical. People prefer one of the possibilities – no solidarity, compulsory solidarity, or voluntary solidarity – to the others and therefore these variables either have the value 0 or 1. If people have a value of 1 on one of the variables it implies that they have a 0 on the other two variables. Logistic multilevel analysis is applied to deal with the type and structure of the data in which each of the three possibilities are the dependent variable for the level and kind of solidarity people prefer towards elderly, the sick and disabled and immigrants. The analyses are performed in two steps. First the effects of the statistical control variables are investigated. The second step examines the influence of economic, social and political openness in different models. The effects of the statistical control variables do not change a great deal after including these national level variables and therefore they are reported separately.

RESULTS

Descriptive results

Table 3 summarises the distribution of people's preference for solidarity towards the three groups of people. At the aggregate level including all 26 countries these preferences are almost the same for elderly and the sick and disabled and are different for immigrants. About 37 percent of the people are not prepared to help the first two groups and almost twice as many people – 75 percent – are not prepared to help immigrants. For all three groups, more people prefer voluntary solidarity compared to compulsory solidarity. Table

3 also shows that there are differences between the 26 countries with regard to the distribution of the preferences. The preparedness to help all three groups is particularly low in Estonia and Ukraine. Nevertheless, that levels of solidarity towards the three groups are not always low is illustrated by Hungary. In this country the willingness to help immigrants is high but the willingness to help the other two groups close to the average. In Sweden and Italy the solidarity with the three groups is the highest.

TABLE 3 ABOUT HERE

Results from the logistic multilevel analysis

The results of the models including the statistical control variables are reported in Table 4. These analyses show that welfare state effort does have some influence on people's preferences regarding the organisation of solidarity. As the welfare state is more extensive, the preference for voluntary solidarity is higher compared to compulsory solidarity. Individual characteristics are also related to people's preferences. People that belong to a religious denomination and those who are higher educated prefer voluntary solidarity. Women are more in favor of compulsory solidarity than men are. Again the results for elderly and the sick and disabled are similar and differentiate from those for immigrants. With regard to the first two groups it is shown that people with a stable relationship and people who are employed prefer voluntary solidarity and that lower educated people prefer compulsory solidarity. With respect to immigrants it turns out that older people prefer voluntary solidarity towards this group.

TABLE 4 ABOUT HERE

Solidarity with elderly

The results of adding economic, social and political openness for the preferences regarding solidarity with elderly people are reported in Table 5. Economic openness is related to a lower preference for compulsory solidarity. Social openness has three effects. People in the socially more open country are a little less willing to support elderly. At the same time, the people who are willing to support this group are more in favour of voluntary solidarity and less of compulsory solidarity compared to people living in socially less open countries. Political openness is related to a lower preference for compulsory solidarity.

TABLE 5 ABOUT HERE

Solidarity with the sick and disabled

The results of the logistic multilevel analysis for the sick and disabled including economic, social and political openness are summarised in Table 6. These results are roughly the same compared to those for solidarity towards elderly with the exception that social openness is related to a higher level of solidarity towards this group and that political openness does not have an effect.

TABLE 6 ABOUT HERE

Solidarity with immigrants

The results from the analyses regarding immigrants differ from the other groups as can be read from Table 7. Here it is found that the economic, social and political openness of countries is related to a stronger preference for voluntary solidarity. Moreover, whereas the openness of countries is related to a lower preference for compulsory solidarity regarding elderly and the sick and disabled this is not the case for solidarity towards immigrants.

TABLE 7 ABOUT HERE

Summary of the findings

Based on the results from the analyses it is concluded that in general – taking into account the general finding across the 26 countries – the willingness to help elderly and the sick and disabled is higher than the willingness to help immigrants and that voluntary solidarity is more strongly preferred for all three groups. Secondly, the openness of countries does influence these preferences but differs for the three groups. In the case of solidarity towards elderly and the sick and disabled the preference for voluntary solidarity is higher and the preference for compulsory solidarity is lower as countries are more open. This is particularly the case for social openness. With respect to immigrants the preference for voluntary solidarity is also higher in more open countries, however for this group the higher openness is not related to less support for compulsory solidarity.

Returning to the formulated hypotheses the following is concluded. The results for Hypothesis 1, the expectation that economic openness is related to a stronger preference for voluntary solidarity, is not confirmed with regard to elderly and the sick and disabled but does hold for immigrants. However, focusing on the first two groups it is shown that there is a lower preference for compulsory solidarity in economically more open countries, nevertheless, this does not result in a stronger preference for voluntary solidarity. The results for all three groups confirm Hypothesis 2, stating that social openness is positively associated with a preference for voluntary solidarity. Hypothesis 3 stating that political openness will not decrease the support for compulsory solidarity is not confirmed. Although the preference for compulsory solidarity is not related to this kind of openness in the case of the sick and disabled, the results show that political openness is related to a stronger preference for voluntary solidarity towards immigrants and is related to less support for compulsory solidarity in the case of elderly. Therefore, Hypothesis 3 is rejected.

CONCLUSION AND DISCUSSION

This study investigated the relationship between economic, social and political openness of countries and the individual preferences for the organisation of solidarity with elderly, the sick and disabled and immigrants. The results differ for the three groups that were distinguished, in the sense that they are similar for elderly and the sick and disabled and different for immigrants. Why people are less supportive towards immigrants compared to elderly and the sick and disabled may be due to two possible explanations, the first arguing that this distinction results from boundaries between the in-group and the out-

group and the second argument is that immigrants are regarded less needy of help than the other two groups, which clearly need assistance from others. Which of the two arguments holds true is a question open to discussion and may be investigated in future research. Furthermore, the results of openness are also different for the three groups, leading to the conclusion that solidarity studies should distinguish which groups people are willing to support. The effects of economic openness were only confirmed with concern to immigrants; people prefer voluntary solidarity towards this group as their country is economically more open. The finding that there is less support for compulsory solidarity in the case of elderly and the sick and disabled is in contrast with the expectation that people are more willing to show voluntary solidarity because of increased insecurity. What it does seem to indicate is that in these instances people indeed question whether the government will be able to support these groups given economic openness but that it is not clear which of the two alternatives people support; it may lead some people to prefer a market solution while others have a stronger preference for voluntary solidarity. Additional research is required to supplement the current analyses to decide what kinds of processes are at work here.

The consequences of social openness for the people's preferences confirm the hypothesis that people prefer voluntary solidarity to compulsory solidarity and the market mechanism. This finding suggests that solidarity and social cohesion are not necessarily undermined by globalisation as is sometimes suggested. That social openness is related with a stronger preference for voluntary solidarity may be related to increased possibilities for communication. Whereas the Internet enables people to have contacts all over the world, it should also be noted that people use it as a means to keep in contact

with people that are close to them. As a consequence, the Internet may also strengthen local networks, which is also confirmed in recent studies about the influence that the Internet has on social relations showing that people use it for their contacts with neighbours and relatives (Franzen, 2000; Hampton and Wellman, 2000).

The expectation was that political openness will have a stabilising effect and therefore the support for compulsory solidarity will not be lower was rejected. A possible explanation for this finding is that people's preferences may be influenced by the information they get from political actors. As has been suggested by others, international political relations and the involvement in international organisations such as the International Monetary Fund and the World Bank influences the views of political actors concerning the policy that should be followed (Simmons, Dobbin and Garrett, 2006). Within these international relations there is a strong preference for neo-liberalism, the political ideology supporting the view that welfare states should be dismantled and cannot be sustained as globalisation moves on. Additional research should investigate whether the people's preferences towards compulsory solidarity and the welfare state are affected by the international processes.

This study contributes to discussions about welfare state policies. A first implication deals with the relationship between the welfare state and solidarity. The welfare state has been criticised for undermining informal solidarity and commitment to society. The findings do show that a more extensive welfare state is related to a higher preference for voluntary solidarity, which does not support the concern that welfare states are crowding out community relationships. In contrast to that, it can be argued that the welfare state enables communities to create voluntary solidarity. The second implication

deals with the organisation of the welfare state. Most of these discussions centre on the dichotomy between markets and governments, as if they are the only two solutions. The argument used in these discussions is that the market should take over if the government cannot function efficiently. The analyses presented in this article show that organising through the community based on voluntary solidarity can be added to this dichotomy and offers a third possible solution. This is not only a matter of theory but should also be considered in practice. If cuts in the welfare states are regarded necessary, this does not mean that the market is the only option at hand but it should be considered to what extent communities and voluntary solidarity could offer a valuable solution as well.

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Table 1. Mechanism, solidarity, and social context

Mechanism	Market	Government	Community
Solidarity	No solidarity	Compulsory solidarity	Voluntary solidarity
Social context	Low level of complexity and uncertainty	Moderate level of complexity and uncertainty	High level of complexity and uncertainty

TABLE 2. Overview of the data

Variable	Level	Data source
<i>Dependent variables</i>		
<i>Preferences for the organization of solidarity</i>	Individual	European Values Study
<i>Independent variables</i>		
<i>Openness</i>		
Economic openness	Country	KOF Index of Globalization
Social openness	Country	KOF Index of Globalization
Political openness	Country	KOF Index of Globalization
<i>Statistical control variables</i>		
Welfare state effort	Country	KOF Index of Globalization
Individual control variables	Individual	European Values Study

TABLE 3. Distribution of the three mechanisms

	Elderly			Sick and disabled			Immigrants		
	<i>Not</i>	<i>Compulsor</i> <i>y</i>	<i>Voluntary</i>	<i>Not</i>	<i>Compulsor</i> <i>y</i>	<i>Voluntary</i>	<i>Not</i>	<i>Compulsor</i> <i>y</i>	<i>Voluntary</i>
France	41	15	44	37	16	47	75	05	20
Great Britain	45	17	38	42	18	41	86	05	10
Germany	46	22	32	50	20	31	77	09	14
Austria	40	14	46	41	14	45	80	05	16
Italy	19	39	41	18	40	42	53	22	24
Spain	43	28	29	45	28	27	65	19	17
Portugal	39	23	37	34	25	41	79	08	13
Netherlands	37	22	41	35	23	43	65	12	23
Belgium	35	26	39	33	27	40	69	13	19
Denmark	33	17	50	30	19	52	70	08	22
Sweden	15	22	63	12	23	65	32	18	50
Finland	29	26	45	27	27	46	77	08	14
Ireland	19	25	47	18	24	58	65	11	24
Estonia	67	18	14	61	22	17	91	06	02
Latvia	44	34	22	41	38	21	88	09	04
Lithuania	66	14	20	65	15	20	96	01	03
Poland	32	30	38	28	32	41	83	07	10
Czech Rep.	37	25	39	24	28	48	85	05	10
Slovakia	31	41	29	29	42	29	79	11	10
Hungary	39	35	26	38	36	26	91	05	03
Romania	33	27	40	36	24	39	78	09	13
Bulgaria	40	27	33	33	29	38	82	08	11
Greece	34	34	33	29	35	36	71	13	16
Malta	23	32	45	18	35	47	73	10	16
Luxembourg	43	15	42	37	17	47	59	12	30
Ukraine	60	21	19	59	21	19	91	05	05
Total	37	25	37	35	26	39	75	10	16

TABLE 4. Logistic multilevel analyses: statistical control variables

	Not			Compulsory			Voluntary		
	<i>Elderly</i>	<i>Sick and disabled</i>	<i>Immigrants</i>	<i>Elderly</i>	<i>Sick and disabled</i>	<i>Immigrants</i>	<i>Elderly</i>	<i>Sick and disabled</i>	<i>Immigrants</i>
Welfare state effort	-0.01 (0.02)	-0.01 (0.02)	-0.03 [†] (0.02)	-0.02* (0.01)	-0.02* (0.01)	0.02* (0.01)	0.05** (0.02)	0.04** (0.02)	0.03 [†] (0.02)
Religious denomination	-0.21** (0.03)	-0.23** (0.03)	-0.12** (0.04)	0.02 (0.04)	0.05 [†] (0.03)	-0.02 (0.05)	0.22** (0.03)	0.20** (0.03)	0.19** (0.04)
Gender (1 = female)	-0.20** (0.03)	-0.17** (0.03)	-0.10** (0.03)	0.17** (0.03)	0.14** (0.03)	0.16** (0.04)	0.07* (0.03)	0.05 (0.03)	0.02 (0.03)
Stable relationship	-0.21** (0.03)	-0.17** (0.03)	-0.05* (0.03)	0.05 (0.03)	0.04 (0.03)	0.04 (0.05)	0.18** (0.03)	0.13** (0.03)	0.04 (0.04)
Employed	0.03 (0.03)	0.04 (0.03)	0.10** (0.03)	-0.17** (0.03)	-0.14** (0.03)	-0.21** (0.05)	0.11** (0.03)	0.09** (0.03)	0.01 (0.04)
Young	0.40** (0.03)	0.24** (0.03)	0.18** (0.03)	-0.24** (0.03)	-0.14** (0.03)	-0.16** (0.05)	-0.23** (0.03)	-0.12** (0.03)	-0.14** (0.04)
Old	-0.04 (0.04)	0.05 (0.04)	0.25** (0.05)	0.01 (0.04)	-0.06 [†] (0.04)	-0.26** (0.06)	0.05 (0.04)	0.00 (0.04)	0.17** (0.06)
Low education	0.12** (0.03)	0.14** (0.03)	0.32** (0.04)	0.09** (0.03)	0.10** (0.03)	-0.08 [†] (0.05)	-0.20** (0.03)	-0.22** (0.03)	-0.41** (0.04)
High education	-0.08* (0.04)	-0.06* (0.03)	-0.38** (0.04)	-0.08* (0.04)	-0.11** (0.04)	0.24** (0.05)	0.14** (0.04)	0.14** (0.03)	0.35** (0.04)
Small town	0.09** (0.03)	0.09** (0.03)	0.11* (0.04)	-0.07* (0.04)	-0.08* (0.04)	-0.03 (0.06)	-0.03 (0.03)	-0.02 (0.03)	-0.15** (0.05)
Big town	0.09** (0.03)	0.11** (0.03)	-0.02 (0.04)	-0.01 (0.03)	-0.05 (0.03)	0.13** (0.05)	-0.08** (0.03)	-0.06* (0.03)	-0.06 [†] (0.04)
Constant	-0.33** (0.08)	-0.45** (0.10)	1.20** (0.15)	-1.12** (0.10)	-1.04** (0.09)	-2.32** (0.13)	-0.76** (0.07)	-0.64** (0.10)	-1.92** (0.17)
Variance	0.10 (0.04)	0.13 (0.06)	0.50** (0.14)	0.16 (0.05)	0.15 (0.04)	0.34** (0.10)	0.04 (0.02)	0.19 (0.06)	0.61** (0.17)

31.554 respondents in 26 countries. Unstandardized regression coefficients are reported; standard errors are in parentheses.

Data sources: European Values Study (EVS); KOF Index of Globalization; International Monetary Fund (IMF)

[†] p < 0.10; * p < 0.05; ** p < 0.01

TABLE 5. Logistic multilevel analyses: elderly people

	Not			Compulsory			Voluntary		
Economic openness	0.05 (0.04)			-0.15* (0.07)			0.04 (0.03)		
Social openness		0.23* (0.11)			-0.31** (0.12)			0.17** (0.06)	
Political openness			-0.12† (0.09)			-0.14* (0.09)			0.02 (0.04)
Constant	-0.36** (0.09)	-0.31** (0.06)	-0.43** (0.09)	-1.12** (0.09)	-1.07** (0.09)	-1.08** (0.07)	-0.77** (0.07)	-0.75** (0.07)	-0.76** (0.08)
Variance	0.08 (0.03)	0.00 (0.00)	0.08 (0.04)	0.14 (0.04)	0.12 (0.03)	0.01 (0.01)	0.04 (0.02)	0.03 (0.02)	0.04 (0.02)

31,554 respondents in 26 countries. Unstandardized regression coefficients are reported; standard errors are in parentheses.

Data sources: European Values Study (EVS); KOF Index of Globalization; International Monetary Fund (IMF)

† p < 0.10; * p < 0.05; ** p < 0.01

TABLE 6. Logistic multilevel analyses: the sick and disabled

	Not			Compulsory			Voluntary		
Economic openness	-0.00 (0.10)			-0.13* (0.07)			0.10 (0.08)		
Social openness		-0.23** (0.16)			-0.24** (0.12)			0.40** (0.12)	
Political openness			-0.09 (0.10)			-0.07 (0.07)			0.13 (0.08)
Constant	-0.47** (0.11)	-0.45** (0.06)	-0.50** (0.11)	-1.04** (0.09)	-1.04** (0.09)	-1.05** (0.09)	-0.65** (0.10)	-0.68** (0.07)	-0.63** (0.08)
Variance	0.28 (0.08)	0.24 (0.10)	0.08 (0.04)	0.13 (0.04)	0.13 (0.03)	0.15 (0.01)	0.18 (0.05)	0.14 (0.04)	0.18 (0.05)

31,554 respondents in 26 countries. Unstandardized regression coefficients are reported; standard errors are in parentheses.

Data sources: European Values Study (EVS); KOF Index of Globalization; International Monetary Fund (IMF)

† p < 0.10; * p < 0.05; ** p < 0.01

TABLE 7. Logistic multilevel analyses: immigrants

	Not			Compulsory			Voluntary		
Economic openness	-0.20 [†] (0.13)			-0.03 (0.11)			0.26* (0.14)		
Social openness		-0.32* (0.16)			0.01 (0.14)			0.57** (0.15)	
Political openness			0.17 [†] (0.11)			-0.02 (0.10)			0.26** (0.11)
Constant	1.20** (0.14)	-1.23** (0.13)	-1.11** (0.12)	-2.33** (0.14)	-2.35** (0.14)	-2.26** (0.12)	-1.93** (0.16)	-1.95** (0.14)	-1.80** (0.12)
Variance	0.46 (0.13)	0.22 (0.12)	0.12 (0.07)	0.34 (0.10)	0.24 (0.10)	0.09 (0.05)	0.53 (0.15)	0.35 (0.13)	0.13 (0.07)

31,554 respondents in 26 countries. Unstandardized regression coefficients are reported; standard errors are in parentheses.

Data sources: European Values Study (EVS); KOF Index of Globalization; International Monetary Fund (IMF)

† p < 0.10; * p < 0.05; ** p < 0.01