

The Impact of Social Policy on Social Trust: Decommodification and Stratification According To Esping-Andersen's Welfare Regime Typology

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ABSTRACT

The main interest of this research consists of introducing an outcome spectrum in studying the welfare state-trust nexus. The latter can be obtained by decomposing Esping-Andersen's welfare regime typology and directly evaluating the effects of decommodification and stratification on trust indexes. The expectation is formulated on the premise of the traditional crowding-out hypothesis which assumes that as the welfare state develops, trust levels decline. The hypothesis is checked based on a cross-sectional analysis for a set of 18 OECD countries while using a multi-level modeling as the main research method. The results obtained permit to reject the crowding-out hypothesis and infer that welfare states may enhance trust formation.

Keywords: trust, welfare state, decommodification, stratification, crowding-out

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1. Introduction

Trust constitutes one of the most debated and interdisciplinary topics which are discussed in economics, management, administrative, computer and social sciences. One such issue which is often mentioned in the literature is the relationship between social policy and interpersonal or institutional trust. Despite the fact that lots of research is dedicated to investigating if and to which degree the welfare state intervention affects an individual's sentiments about other people and public institutions, it remains unclear whether social policies can be considered positive or negative investments in trust. The common feature that characterizes the vast majority of such studies is a predominant use of social spending as a measure of the welfare state development.

In general, the relationship between trust and social policy puzzles many scholars. Even a superficial analysis indicates that the welfare state can be a contextual variable that shapes trust formation process but it has a multi-dimensional effect on trust indexes which cannot be studied within a simplified social spending framework. Indeed, if it is only social spending why then one find almost similar levels of interpersonal and institutional trust in liberal and conservative welfare regimes which differ so much in their share of GDP spent on social policy programs. Spending definitely matters but there must be something else in the welfare state effects that is so important for trust but cannot be captured by the conventional measures.

The main objective of this article is to introduce an "outcome" spectrum in analyzing the relationship between welfare states and trust. This new approach is aimed at assessing the effects of social policy outcomes on faith of people in others and public welfare institutions. A successful way to describe such outcomes of welfare state policies is proposed by Esping-Andersen in his famous classification of welfare state regimes formed along three dimensions: decommodification, stratification and de-familialization. These three dimensions can be considered a key estimation of consequences of social policy implementations. More specifically, the interest of this paper lies in investigating whether the degree of decommodification and the nature of stratification mechanism will influence social trust formation. Another question is whether these measures of welfare state development are better than the conventional ones limited to social spending.

On the one hand, this new approach will allow one to reveal the direction and the size of effects decommodification levels have on trust. On the other hand, the analysis will go beyond investigating the quantitative side of

relationships and will give an insight into the qualitative consequences of social policies on the society structure and their impact on trust. The study will thus focus on the kind of links that exist between different types of social stratification and trust. The results will hence have direct policy implications since based on the obtained relationships, it will become possible to predict possible consequences for recent trends in welfare states' adoption of the liberal paradigm in securing individuals' well-being.

The paper is structured as follows: in the second section, an overview of literature about the state activity affecting trust is provided, which is supplemented by an argument in favor of a new approach. This will be followed by methodology discussions and method descriptions. Finally, discussions will be closed by the results interpretation and the identification of directions for future research.

2. The state and trust: a literature overview

There is no agreement among scholars about the nature of the effects welfare state conducts on trust. It is possible to distinguish among several points of view in the literature that discuss this relationship, all of them being based on the assumption that the causality goes from the welfare state to social trust and not vice versa¹. The first point of view can be called as the 'civil society erosion' argument which assumes the dependence of trust on levels of development of civil society. Here, the effect of welfare state is mediated through civic engagement. This thus suggests that welfare state may discourage civic engagement and as such social trust levels go down. In other words, when social obligations become public, intimate ties weaken and civil society and norms of reciprocity are crowded out. This argument however remains largely theoretical. On the one hand, there is no empirical research up to now which would demonstrate that the welfare state activity discourages civic engagement. On the other hand, the theory is quite ambiguous about the fact that civic engagement can be a determinant of trust (Kumlin and Rothstein 2007, Newton 2001, Uslaner 2000-2001).

¹ Although the assumption prevailing in the literature assumes that causality direction goes from the welfare state to social trust, one can easily contest its plausibility. A simplistic explanation would be an argument that in more trusting societies people may delegate more functions to the welfare state when compared to less trusting societies. Logic also suggest that people living in more trusting societies may more readily give over their income to the state which can hence offer more generous benefits since they know that the risk of its misuse is smaller than in less trusting societies. Nevertheless, to check the direction of causality, one needs to have longitudinal data for trust, which are not available (to my best knowledge). Hence one should mention that the problem of endogeneity may arise and hence the obtained coefficients on welfare state measures may be considered inconsistent and inefficient if the opposite direction of causality is proved correct.

Alternative explanations of welfare state effects on social trust are provided by Fukuyama and De Swaan and can be called as the 'moral destruction' argument. They both suggest that crowding-out in trust will happen if the state starts to undertake activities that are better left to the private sector or to civil society. Fukuyama (2000) explains that if the state gets into the business of organizing everything, people become dependent on it and lose their ability to work with one another. According to De Swaan (1988), the state activity erodes the individual's sense of responsibility for caring about family members and friends. Both results supposedly lead to less trust. However, these mechanisms of crowding-out have never been studied empirically.

There are several scholars who support the opposite effects of welfare states. A positive impact on social trust is recognized by Szreter, Patulny, Knack and Zack, Bjonskov and Bonoli. They all base their argumentation on the idea that social policy helps in this way or another to integrate an individual into the society. As a consequence, these theories can be called the 'integration' argument. Szreter (2002), for instance, argues that high support of the state may result in high levels of trust since if government guarantees to keep an individual alive and in good health when he or she has difficulties, then the individual does not feel abandoned but integrated and as a result his or her perception of failing substantially decreases, which forms necessary grounds for high institutional and interpersonal trust. Patulny (2005) continues this reasoning and suggests that any type of welfare regime may enhance trust: universal welfare regimes support bridging social capital, whilst rational familiarity-based trust must play substitute when social policies encourage individual and familial reliance. Knack and Zack (2001) emphasize that social policy tends to reduce income inequalities and hence can be considered an instrument of raising trust in the society. Bjonskov (2005) uses a similar reasoning by arguing that the welfare state makes people's lives more certain by protecting them from severe income losses and by redistributing substantial sums from the rich to the poor, thereby quasi-artificially making the income distribution more even. Bonoli (2001) in his turn demonstrates that shrinking of the welfare state can lead to an increase of uncertainty among the population, which may entrain loss of their confidence in the future which negatively affects their trust levels.

These theoretical arguments have been broadly supported by the results of empirical analysis. The findings usually demonstrate a positive correlation between social policies and trust indexes (Delhey and Newton 2004, Knack and Zack 2001, Van Oorschot and Arts 2005). The distinctive feature of all

these studies is that they largely rely on using social spending as a measure for the welfare state development.

This drawback is to some extent corrected by theories grouped into the 'institutional' argument that emphasize the role of institutions in inducing pro-social behavior. They refuse from viewing the relationship between the welfare state and trust as purely quantitative and refer to the need to take into account the qualitative side of welfare state arrangements. This argument can be divided into macro- and micro-level sub-arguments with the former stressing the quality of public institutions and the latter emphasizing the institutional design of benefit schemes.

More specifically, macro-institutional theories assert that efficient state institutions promote more trusting societies through reducing the risk involved in agreements. This happens due to the fact that the state may serve as the third-party enforcer of agreements through the administration or courts with the power to impose fines or other penalties or sentences and in this way it boosts social trust (Herreros and Criado 2008, Rothstein and Stolle 2002, Tillmar and Lindkvist 2007). However, this statement is often opposed by the idea that in this way, the state does not generate trust but rather substitutes it (Noteboom 2006). An alternative way of public institutions influencing trust (in particular institutional trust) consists of evaluating by citizens the quality of performance of these institutions (Edlund 2006, Mishler and Rose 2001) or that of elected officials (Thomas 1997).

The micro-level institutional theories are focused on the fact that a particular design of welfare state programs may explain the kind of influence they conduct on trust. Crowding-out is expected in the case of means-tested schemes while universal non means-tested schemes are usually assigned positive influence on people's trusting attitudes (Rothstein and Uslaner 2006, Kumlin and Rothstein 2007). This happens since universal programs are more efficient in reducing income inequalities and tend to promote equality of opportunities. These theories are therefore focused on the relationship between the welfare state and an individual and they do not take into account the changes in the societal structure induced by social policies.

Finally, the last block of literature on the relationship between trust and the state recognizes the possibility of a synergy and can hence be called 'synergetic'. Fox (1996), for instance, refers to 'political construction' as an idea of creating incentives by the state for the collective actions from below.

In tune with him, Evans (1996) suggests that norms of cooperation and networks of civic engagement among ordinary citizens can be promoted by public agencies which can take the form of either complementarity or embeddedness. Heller (1996) goes further in his discussion of a state-society synergy demonstrating that the vigor and dynamism of civil society can be associated with a strong state. These discussions are however purely theoretical and are based on case studies conducted in countries of the third world.

The above-presented overview on the relationship between the state and trust allows one to draw certain conclusions that open up the space for further research. The most obvious drawback is the lack of empirical studies on the effects social policies have on trust. There is an explicit dominance of theoretical discussions that largely speculate about the kind of linkages between trust and the welfare state without employing statistical techniques for checking the plausibility of the ideas underlying the relationship. The studies on the crowding-out hypothesis constitute an exception here since they usually include some empirical analysis that tries to identify and explain ways in which social policies shape trusting attitudes among individuals. There are however certain limitations in the extent to which such results indeed reflect the sensitivity of trust formation to contextual conditions formed by the welfare state. The main weakness is the prevalence of a naïve conviction that the degree of welfare state intervention can be uniquely measured through its expenditures which results in often operationalization of the welfare state through total social spending measured as a percentage of GDP. Although it is not correct to argue that it is a totally false approach, logic suggests that this macro-level index lacks micro-level foundations and is to some extent detached from the processes that take place at the individual level. First, social spending does not reflect the actual level of support the welfare state provides to an individual since how much the state spends depends not only on generosity of social benefits paid, but as well on coverage rates. The same level of spending can thus be obtained in countries with high benefit levels but small coverage rates or in the countries with low benefit levels but high coverage rates. Second, social spending does not fully reflect the dynamics in benefits' changes since an increase in levels of spending can also be a result of an increase in the number of eligible recipients without being necessarily linked to a change in a particular benefit level. Generally, this argument is related to the magnitude of social problem that a country experiences. Social spending depends on the actual size of problems perceived as socially or economically undesirable. More spending might not mean more generous benefits but the presence of more difficulties which require the welfare state intervention. The countries which spend more usually have a more advanced process of

population ageing or higher levels of unemployment, for instance. Hence, their generous financing of social policies at the macro-level is not necessarily linked to more generous benefits at the micro-level but is solely stipulated by more problematic political, economic or social developments which lead relatively more people to experience those contingencies whose consequences the welfare state is designed to off-set or smooth.

These simplistic considerations point out that the traditional way of operationalizing the welfare state development cannot fully capture the extent to which the state affects an individual's well-being. It is uncontested that there is a certain association between what the state spends and the amount of the support that an individual gets, but they are not necessarily identical since social spending does not reflect the extent to which the welfare state allows for outsourcing of an individual from the market. This can be also confirmed by a relatively moderate strength of correlation between total social spending and decommodification indexes, which is slightly less than 0.7. An objection to using this measure of the welfare state development can be thus reduced to an argument that social spending reflects the process of the state intervention rather than its outcomes and therefore, it is not fully effective in describing the results of the welfare state functioning. The need hence consists in introducing an outcome spectrum in the analysis of welfare state effects.

One such approach that partially solves the problem is to use Esping-Andersen's welfare regime typology. It allows one to narrow down the gap between macro-level processes and their micro-level outcomes in two ways. First, it is more strategic in the sense that it is not input- but rather outcome-oriented and hence it permits to estimate more precisely the magnitude to which the state prevents and corrects for the consequences of social contingencies. Second, this typology is built not only upon quantifying the extent of relations between the welfare state and an individual but also refers to qualitative changes in the relations between an individual and the society occurred as a consequence of the welfare state intervention.

Despite the great potentiality of such a measure, it is however associated with certain methodological limitations in practice which lie in a predominant use of exclusively dummies for welfare regimes in the analysis. These studies usually demonstrate that Social democratic welfare regimes has higher levels of social trust compared to Conservative and Liberal ones (Van Oorschot and Arts 2005). But investigations based on dummies are not perfect as well, since they reflect the joined effect of social policies and it still remains unclear whether it is the level of benefit generosity or the type of

social stratification resulting from social rights which can be claimed responsible for variations in trust levels across welfare regimes. It should not be forgotten that Esping-Andersen's welfare regime typology is by itself a multidimensional concept which is created along dimensions of decommodification, stratification and de-familialization.

The general logic of the analysis thus triggers the need to introduce a new way of operationalizing welfare states which would more accurately approximate the degree of their development while still being in a direct way linked to the outcomes of the state intervention in social arrangements at the micro-level. I propose that this measure can be obtained by decomposing or disentangling Esping-Andersen's welfare regime typology into two dimensions and directly relating each dimension to trust indexes². These dimensions are decommodification and stratification that assess effects of the degree of outsourcing of an individual from the market on the one hand, and of the stratification mechanism, on the other. The main advantage of this approach is that it allows one to measure the development of welfare states through its outcomes, which brings a new spectrum in studying welfare state effects on trust.

3. Decommodification and stratification: two dimensions of the outcome spectrum

By analyzing the relationship between market, state and family, Esping-Andersen constructs a welfare state typology which distinguishes between three types of welfare regimes: conservative, liberal and social democratic. He uses a two-dimensional approach to describe and explain the key philosophy and principles upon which each welfare regime is based that are directly linked to outcomes of the welfare state intervention. These dimensions are decommodification and stratification.

Esping-Andersen (1990) refers to decommodification as the degree to which individuals or families can uphold a socially acceptable standard of living independently of market participation. Each welfare regime type is thus based on the idea of providing different levels of decommodification which is rooted in the specific regards of the state as the main provider of welfare to individuals. Conservative ideology presumes that commodification is morally degrading, while individuals are not meant to compete but rather should subordinate self-interest to recognize authority and prevailing institutions. This idea results in relatively high levels of decommodification

² Esping-Andersen's welfare regime typology is sometimes very criticized (see for instance Bannink and Hoogenboom (2007), Orloff (1996) and Bonoli (2001)).

that however are related to individual's work history. Liberalism is based on the idea of a self-regulatory mechanism that the market possesses through which people should secure their own well-being. The intervention of the state is hence minimized to those who are unable to participate in the labour market while providing to them a minimum decommodification level through means-tested social assistance. Social democratic welfare state has an objective to free an individual from both labour market and the family which is realized through guaranteeing high decommodification levels to all citizens on a universal basis.

Another dimension of the welfare state classification describes how social policy structures society which allows to investigate stratification effects of welfare states. The main objective here is to show that the programs of the similar 'size' could produce very different outcomes overall, which allows one to classify welfare states beyond efforts or generosity. Esping-Andersen (1990) distinguishes between three different traditions in stratifying society each of which is inherent to three welfare regime types. Conservative welfare regimes aim at preserve existing status which is attained through constructing status-oriented social insurance schemes. Liberal welfare regimes are designed to punish an individual for relying on the welfare state which leads to creating a dualism in the society: the society is divided into two groups where the first one embraces all unfortunate relying on stigmatizing relief, and the second one includes privileged people capable to derive their welfare from the market. Social democratic welfare regimes are oriented on constructing solidarity among workers and are designed to promote universalism which equalizes the status, benefits, and responsibilities of citizenship.

Table 1: Levels of decommodification and stratification by welfare regime type³

	Conservative welfare regime	Liberal welfare regime	Social democratic welfare regime
Decommodification	29	18	36
Stratification			
a) Corporative	6.0	1.3	4.5
b) Liberal	5.7	7.6	6.0
c) Social democratic	3.2	4.3	5.5

The indicators of decommodification and stratification (both calculated by Esping-Andersen and recalculated later by other scholars) vary accordingly to the logic of welfare state regimes. Social democratic regimes offer the highest levels of decommodification and they highly score on universalism. Nevertheless, they also load to some extent on the corporative status-oriented approach since even in social democratic welfare states there is a certain link of benefits to the work history of an individual which was imperative for the inclusion of the middle-class into social security systems. Surprisingly, social democracy also scores on liberalism which reflects the degree of reliance on the market. This indicates that these societies managed effectively to supplement their social security systems with private insurances which allow them to lessen pressures created by recent economic and social dynamics.

Conservative welfare regimes offer relatively high levels of decommodification which are provided based on highly status-oriented insurance schemes. Universalism is poorly pronounced in such welfare states, which results in low levels of loading on universalism measures. Market solutions are however not excluded and private insurance is sought to be a complement to, but not a substitute for, social security systems.

³ The corporatism variable records the segmentation of public pension programs based upon major occupational categories and the etatism that reflects the level of pension expenditures for government employees as a percentage of gross domestic product. Liberal social stratification is measured by the importance of normal means-tested poor relief (as a share of overall public social expenditures), by the public-private mix (the ratio of private pensions to total pensions and by a similar share of private health expenditures in total health expenditures). Socialist social stratification is measured by universalism (the average portion of the workforce eligible for benefits in three social insurance programs: unemployment, sickness, and old-age pensions) and benefit equality (the ratio of basic benefits to maximum allowable benefits averaged over the same three programs (Scruggs and Allan, 2006a).

Finally, liberal welfare regimes offer low levels of decommodification for all the three programs (pension, unemployment and sickness). Liberal welfare states have the highest levels of loading on the measure of dualism which reflects a heavy reliance on market solutions. They are not deprived from the universal principle which is however understood differently if compared to social democratic welfare states. Universalism is stressed in the sense that all people have a universal access to predominantly means-tested social programs. The means-tested approach also excludes status-orientation in defining the amount of social benefits which is confirmed by low scoring on conservative measures of stratification.

A juxtaposition of these measures with the conventional ones points out a certain advantage in using them for the analysis.

Table 2: Correlations between conventional and new measures of welfare state development

	Total social spending	Decommodification	Income inequality	Status-oriented	Dualism	Universalism
Total social spending	1					
Decommodification	0.691***	1				
Income inequality	-0.773***	-0.919***	1			
Status-orientation	0.460*	0.310	-0.380	1		
Dualism	-0.400*	-0.218	0.193	-0.323	1	
Universalism	0.312	0.307	-0.237	-0.378	-0.137	1

As it was stated before, social spending does not necessarily mean high decommodification levels. There is a certain correlation between them but its strength is relatively moderate. Moreover, decommodification is much closer to the main outcome of social security systems which consists of reducing income inequality levels. The correlation between them is almost perfect (-0.919), which confirms the above-stated assertion that decommodification is a more outcome-oriented measure.

Total social expenditures correlate more with stratification measures. This allows one to infer that social expenditures reflect a joint effect of decommodifying and stratifying and hence it becomes difficult to separate effect of a program's size from overall outcomes for the social structure. Esping-Andersen's measures are more consistent in isolating these effects. Decommodification scores have a weaker correlation which is also not statistically significant. Hence, outcome measures are closer to the scope of separating the effects of welfare state functioning on trust. But statistically

speaking, these measures just reduce but do not fully eliminate the problem of combined effects. In other words, we are still at a loss when we ask whether it is decommodification and/or which dimension of stratification which have impacts on social and institutional trust after controlling for others. This seems just impossible with hierarchical linear models today.

The article thus puts forward two main ideas for empirical analyses of the connection between the welfare state and trust by focusing more on outcomes of the welfare state intervention. The first idea proposes to use levels of benefit generosity as a better operationalization of decommodification instead of using levels of social spending (% of GDP). The second idea captures stratification levels as policy outcomes. The expectations are formed based on the crowding-out hypothesis and can be formulated as follows:

Hypothesis 1: Higher levels of decommodification are associated with lower levels of trust.

Hypothesis 2: Social democratic and conservative stratification scores are negatively associated with trust indexes.

Hypothesis 3: Liberal stratification scores are positively associated with trust indexes.

4. Data source and methods description

Data source

The main data source is the World Values Survey that contains measures reflecting people's attitudes and beliefs in a wide range of social domains including trust. Although other data sources are available that could offer a better measurement scale for interpersonal trust (continuous and not dichotomous), the preference is given to the WVS due to a wide range of countries participating in the survey. I will use the data from the wave - 1999⁴. From the pooled sample, I select those countries for which the corresponding measures of the welfare state are found. In other words, their choice is based on the availability of data on decommodification and stratification indexes. The working sample will hence include the following

⁴ The data was taken from the wave 1999 with a scope to bring closer in time trust indexes and decommodification and stratification scores since these two measures are available only for the year 1999.

countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Great Britain, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Sweden, Switzerland and the United States⁵.

Methods description

The relationship between decommodification and stratification levels will be based on a cross-sectional approach with the use of a multilevel modeling. A multilevel linear regression will be applied to detect the direct influence of relevant measures of welfare state development on respondents' indicators of institutional trust. For interpersonal trust, I will use a multilevel logistic regression. I will model only fixed effects while random effects will not be included. This can be explained by the fact that I am primarily interested in studying how the effects of a country-level variable, namely, the welfare state, affects trust levels, which can be done through fixed effects. Moreover, I will not include other country-level covariates in the equation due to the small number of cases at the second (country) level.

The operationalization of the models will be done as follows:

Dependent variables

As it usually appears in the literature, I distinguish between two types of trust: interpersonal trust and trust in institutions. Interpersonal trust is defined on the basis of the following question: 'generally speaking, would you say that most people can be trusted or that you cannot be too careful in dealing with people?'. The positive answer on the first part of question is interpreted as high levels of trust, and is assigned the value of 1. The opposite answer is treated as low levels of trust, and has the value of 0.

Trust in institutions is a synthetic variable constructed on the basis of a range of questions concerning people's confidence in various institutions. The answer to each question is measured on a four-scale basis varying from 'a great deal' to 'none at all'. For this dependent variable, I selected the following institutions: the police, parliament, civic service, social security system, health care system, and justice system. Van Oorschot and Arts (2005) show by using factor analysis that all of them load on the same construct and the new scale provides quite high reliability levels (0.80). I came to the

⁵ According to Esping-Andersen, Australia, Canada, Great Britain, Ireland, New Zealand and the United States belong to liberal welfare regimes. Austria, Belgium, France, Germany, Italy, Japan, the Netherlands and Switzerland form conservative welfare regimes. Finally, Denmark, Finland, Norway and Sweden represent social democratic welfare regimes.

same conclusion while repeating the factor and reliability analyses. The new variable 'trust in institutions' is calculated by summing-up scores of construct-parts, so that the new scale had values varying from 6 to 24. However, for the ease of interpretation, the values are recorded into the range from 1 to 19 reflecting respectively 'no trust' to 'high trust' in the selected institutions.

Independent variables

Decommodification level is operationalized through benefit generosity index which represents the level of generosity of social benefits. The indicators are calculated by Scruggs and Allan (see Scruggs and Allan 2006 for more details) and made available to the public through their publications. I also use their stratification indexes for operationalizing stratification levels in the countries of interest. The indexes are again obtained by replicating Esping-Andersen's analysis of stratification scores (see Scruggs and Allan 2006 for more details). It should be noticed that three stratification scores (liberalism, conservatism and socialism) are calculated for all the countries under the assumption that countries belonging to the relevant welfare regime would load heavily on the corresponding stratification score and poorly on the other two.

Control variables

At the individual level, I control, on the one hand, for socio-economic/demographic variables (age, gender, education, household income, employment status), on the other hand, I hold constant attitudinal, perceptual and behavioral causal mechanisms through which socio-economic/demographic variables may have an impact on trust (civil society activity, sociability, religion and religiousness).

Volunteering effects are controlled for by summing up the variables that have value of one if the individual is doing voluntary work for sport activity clubs, cultural/hobby, business/professional, consumer, humanitarian, environmental, peace, animal, religious or other voluntary organizations. The new variable reflects the number of memberships of the individual in voluntary organizations. The socializing variable is constructed on the basis of a question about the frequency of meeting with friends outside work which ranges on a seven-point scale from 'never' to 'every day'. 'Household income is measured by a ten-point scale that individuals use in the WVS to self-rate their income status and which is divided into five groups forming five quintiles. Unemployment is controlled by the dummy with other

employment status as reference category (1=unemployed, 0=other). I also include dummies for Catholics and Protestants while all other religions are combined in the single group 'other'. As the reference category, I use the group of non-religious people. Religiousness is an interval-scale variable constructed on the basis of the frequency of church attendance. Education is measured by the highest degree obtained by the individual, which is described on the basis of a 6-degree scale. They are further categorized in three distinct groups: low-educated, middle-educated and highly-educated. I operationalize the age variable by calculating the actual age of respondents (in years) at the moment the survey was conducted and creating on its basis three groups: the first one comprising those between 15 and 29, the second of those between 30 and 44, and the third of those aged 45 and older. For controlling the gender of respondents, I construct a dummy with the following values: 1 for male, and 0 for female.

5. Results and discussions

The starting point of the analysis is the intercept-only model, that is, the model including no explanatory variables. For institutional trust, the estimate of variation at country level is equal to 0.350 and is statistically significant. The estimate of variation at individual level is found to be 9.722 and is as well statistically significant. For interpersonal trust, gllamm reports only the between-country variance, which is estimated at the level of 0.339 while also being statistically significant. These estimates suggest that countries do differ in their average trust scores and there is even more variation among people within countries than between countries (the variance component within countries substantially exceeds the variance component between countries). The intraclass correlation equals 0.035 or in other words 3,5% of the institutional trust total variance occurs between countries.

Table 3: Micro-level determinants of institutional trust⁶

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Volunteering					0.305***	0.299***	0.298***	0.313***	0.301***	0.278***
Sociability		0.481***	0.443***	0.400***	0.505***	0.504***	0.578***	0.589***	0.582***	0.561***
Religion										
Catholic				0.504***	0.172**	0.175**	0.167**	0.163**	0.143**	0.145**
Protestant				1.088***	0.970***	0.975***	0.956***	0.939***	0.926***	0.916***
Other				0.250***	0.202**	0.190**	0.190**	0.190**	0.191**	0.190**
Religiosity					-0.122***	-0.124***	-0.116***	-0.115***	-0.114***	-0.115***
Gender						0.116**	0.103*	0.100*	0.103*	0.079
Age										
15-29							Ref. category	Ref. category	Ref. category	Ref. category
30-44							-0.047	-0.075	-0.084	-0.148*
45-more							0.280***	0.212***	0.190***	0.152**
Education										
Lower										
Middle										
Upper										
Unemployed										
Income										
1 st qu.										Ref. category
2 nd qu.										0.281***
3 rd qu.										0.290***
4 th qu.										0.355***
5 th qu.										0.366***
Variance at the individual level	9.722***	9.637***	9.580***	9.501***	9.458***	9.439***	9.390***	9.301***	9.298***	9.278***
Variance at the country level	0.350**	0.348***	0.348***	0.348***	0.348***	0.348***	0.348***	0.344***	0.344***	0.346**
Number of cases at the country level	18	18	18	18	18	18	18	18	18	18
Number of cases at the individual level	25257	25257	25257	25257	25257	25257	25257	25257	25257	25257

⁶ * = significant at 0.05 level, ** = significant at 0.01 level, *** = significant at 0.01 level.

Table 4: Micro-level determinants of interpersonal trust⁷

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Volunteering		1.404***	1.446***	1.393***	1.413***	1.407***	1.402***	1.295***	1.289***	1.238***
Sociability			1.028	1.027	1.022	1.026	1.025	1.056**	1.065**	1.089**
Religion										
Catholic				0.701***	0.670***	0.672***	0.673***	0.745***	0.739***	0.729***
Protestant				1.529***	1.505***	1.512***	1.521***	1.698***	1.685***	1.653***
Other				.805***	0.809***	0.800***	0.790***	0.789***	0.770***	0.730***
Religiousness					0.981***	0.978***	0.976***	0.988***	0.989***	0.986***
Gender						1.122***	1.127***	1.117***	1.117***	1.071**
Age										
15-29							Ref. category	Ref. category	Ref. category	Ref. category
30 - 44							1.178***	1.227***	1.222***	1.127***
45 - more							1.012	1.162***	1.149***	1.128***
Education										
Lower										
Middle										
Upper										
Unemployed										
Income										
1st qu.										
2nd qu.										
3 rd qu.										
4 th qu.										
5 th qu.										
Variance at the individual level	Not reported	Not reported	Not reported	Not reported	Not reported	Not reported	Not reported	Not reported	Not reported	Not reported
Variance at the country level	0.339***	0.339***	0.339***	0.339***	0.339***	0.339***	0.339***	0.330***	0.330***	0.330***
Number of cases at the country level	18	18	18	18	18	18	18	18	18	18
Number of cases at the individual level	25257	25257	25257	25257	25257	25257	25257	25257	25257	25257

⁷ In the table, the odds ratio (and not β -coefficients obtained from the logistic regression) is reported. The odds ratio is calculated by taking the exponential of the corresponding β -coefficients.

⁸ * = significant at 0.05 level, ** = significant at 0.01 level, *** = significant at 0.001 level.

Table 5: Macro-level determinants of institutional and interpersonal trust

	<i>Institutional trust</i>					<i>Interpersonal trust⁹</i>				
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 1	Model 2	Model 3	Model 4	Model 5
Total Social Spending	0.070*** ¹⁰					1.028***				
Decommodification		0.089***					1.039***			
Corporatist stratification			-0.071***					0.988***		
Liberal stratification				0.143***					0.976***	
Social democratic stratification					0.190***					1.057***
Variance (individual level)	9.274***	9.273***	9.275***	9.271***	9.272***	Not reported	Not reported	Not reported	Not reported	Not reported
Variance (country level)	0.300*	0.298*	0.285	0.238	0.224	0.196**	0.196**	0.125	0.184	0.265
Number of cases (country level)	18	18	18	18	18	18	18	18	18	18
Number of cases (individual level)	25257	25257	25257	25257	25257	25257	25257	25257	25257	25257

⁹ the odds ratio is reported in the table

¹⁰ * = significant at 0.05 level, ** = significant at 0.01 level, *** = significant at 0.001 level.

Inclusion in the model of individual-level control variables helps to explain some within-country variance but only to a limited extent. This supports a widely recognized assumption that social trust still constitutes a concept which is not fully understood. There are other (still unknown) determinants that predefine the level of trust for a given individual. As far as the effects of selected individual-level determinants for social trust show, their direction and strength are almost always in line with the theory (Table 3 and 4).

Higher levels of trust are found more often among people involved in volunteering activity as well as among sociable individuals. Religiousness can be also considered a strong determinant for both forms of trust. The type of religion however influences differently institutional and interpersonal trusts. Catholics are found to have more trust in institutions compared to non-religious people, but their interpersonal trust is lower compared to people without any religion as well as compared to Protestants. Protestants show higher levels of indexes compared to non-religious people for both interpersonal and institutional trust. Other religions tend to have less confidence in other people but more trust in institutions compared to non-religious individuals.

With age people tend to become more trusting towards public institutions as well as towards other individuals. Moreover, this relationship should be recognized as non-linear. In the case of interpersonal trust, people aged 30-44 have as more trust as people aged over 45 when compared to those between 15-29 years old. For institutional trust, I find that people aged 15-29 have more trust than those aged 30-44. But the people aged over 45 have higher trust levels than younger people.

Income also has a positive impact: better-off people show higher levels of interpersonal and institutional trust although the effects are not completely linear. The influence of gender is not found to be statistically significant for all the cases. Males have more trusting attitudes mostly towards other people but not towards public institutions. As it always appears in the literature, unemployment negatively affects the level of interpersonal and institutional trust. Education also conducts impacts on social trust indexes but their direction differs across trust forms. More educated people show more positive attitudes towards other individuals. In the case of institutional trust, the impact of the education is rather reverse and non-linear, while still indicating that more education usually leads to less positive sentiments about public institutions.

The effects of different measures of the welfare state development reveal interesting nuances. In total, the inclusion of the measurement of decommodification levels substantially reduces between-country variance: by about 42 percent for interpersonal trust and by 14 percent for institutional trust. This suggests that benefit generosity essentially predetermines people's trusting attitudes. The effect of total social spending on variance changes is almost identical to the previously mentioned one. Both measures conduct a positive effect on interpersonal and institutional trust although its strength is somewhat larger for decommodification. This can be considered evidence that social expenditures constitute a good proxy for decommodification, but they are still not perfect in measuring benefit generosity levels. Why the effect of decommodification is stronger than the effect of total social spending is a tricky question. A potential answer can be derived from numerous studies which indicate that what matters for trust is income equality since trust is more likely to appear between equal individuals. Social policies hence materialize their impacts on interpersonal and institutional trust through reducing inequalities in the society. Since decommodification indexes approximate more accurately or closely the impact of social security systems on reduction of income inequalities than social expenditures do, their effect on trust can be stronger than that of social spending.

In line with the previous findings, the results advocate for the presence of crowding-in rather than crowding-out. Benefit generosity enhances both forms of trust. More specifically, an increase in levels of decommodification by one point leads to an increase in institutional trust by 0.089 points when controlling for other variables (Table 5). In the case of interpersonal trust, one point increase in the level of benefit generosity entrains 3.9 percent increase in odds of trusting other people (Table 5).

The effects of stratification scores differ a lot from impacts of social spending moving sometimes in opposite directions. This confirms the expectations that what matters for trust is not only the amount of benefits paid but also the framework within which their provision is embedded. Social expenditures fail to capture variations of principles (across countries) upon which the general framework of social security system is based and reflect rather the macro-level size of social programs than their outcomes for social relations.

Universalism conducts a positive effect on both forms of trust fostering their accumulation. An increase in social-democratic stratification measures by one point increases institutional trust by 0.190 points and enhances the odds

of trusting other people by a factor of 1.057. Social-democratic measures of stratification reflect to a great extent the equality of opportunities with respect to social benefits. It compliments income equality which is largely conditioned upon decommodification levels. How equal is one's access to welfare state programs and how equal is the benefit you can get out of social security systems shapes people's trusting attitudes. More equality in both dimensions may teach people to develop more positive sentiments towards public institutions but also towards other individuals.

Conservatism with its class-related and status-oriented preferences reduces trust among people. An increase in measures of conservatism by one point leads to a decline in institutional trust by 0.071 points and a reduction in the odds of trusting other people by a factor of 0.988. Individuals tend to display less trust in institutions which reproduce the existing class-structure or income distribution. Such institutions hence do not set as an objective the elimination of distances between groups of people in the society but rather preserve or widen them. People therefore feel equal neither in their treatment by the system nor with respect to other people in the societal structure in general, which inhibits trust accumulation.

Finally, liberalism with its deeply rooted dualism conducts positive effects on institutional trust and negative on interpersonal trust. An increase in liberalism measure by one point increases institutional trust by 0.143 points and reduces the odds of trusting other people by a factor of 0.976. Stigmatizing individuals experiencing social risks is not a decisive predictor of institutional trust. People continue trusting to public institutions since they support the minimalistic approach to the state intervention and means-testing as a basic principle of defining the access to, and the amount of, benefits. This however affects negatively the environment in which interpersonal trust formation happens. Social policies bring a divide in the society which cannot be easily overcome in the process of eliciting trust.

If we assume that the welfare state is the only contextual variable that shapes social trust at the macro-level, one can calculate the final effect that it conducts on trust indexes. The logic is simple: I intend to see how much the trust level of a person will vary if he or she supposedly resides in different types of welfare regimes. Hence, the individual characteristics of a person do not change, while the welfare state becomes the only predictor which accounts for the variation in trust across countries. The mathematics is simple and it mainly refers to summing up the products of regression

coefficients for each measure of the outcome dimension on the actual value of these measures averaged out across welfare regimes¹¹.

Table 6: Final effects of the outcome dimension on interpersonal and institutional trust

	<i>Institutional trust (points)</i>			<i>Interpersonal trust (percentage points)</i>		
	Effect of decommodification	Effect of stratification¹²	Total effect	Effect of decommodification	Effect of stratification	Total effect
Social democratic	3.2	1.6	4.8	140.4	11.5	151.9
Liberal	1.6	1.9	3.5	70.2	4.7	74.9
Continental	2.6	0.9	3.5	113.1	-2.6	110.5

The results provide an interesting insight into the impact the welfare state conducts on both types of trust which can be also fruitful in explaining the variation of trust across welfare regimes. The prevailing trend is that decommodification is a primary factor that conditions levels of trust in each welfare state. If supplemented by the effects of the stratification mechanism, one can explain the paradox about the variation of trust across welfare regimes stated at the beginning of the paper. For institutional trust, the impact of the outcome dimension is more positive for social democratic welfare states and less positive for conservative and liberal welfare regimes. It is surprising that the total effect is identical for the liberal way of organizing welfare state arrangements with that for the conservative. In this particular case, the higher level of decommodification prevailing in continental Europe is outweighed by a negative effect of its conservative stratification mechanism. The trend for liberal welfare states is opposite since their relatively low levels of decommodification is supplemented by a strong positive effect of their stratification mechanism. This ranking is completely in line with the variation of institutional trust across welfare regimes which refer to the fact that people living in liberal welfare states trust their institutions equally much as people of continental Europe do, despite the fact that their welfare states offer lower levels of benefit generosity. One can hence infer that this paradox is largely due to the

¹¹ This does not give a complete insight since decommodification and a combined stratification score do not have identical scale size, but this approach can be useful in understanding the general logic of welfare state effects on trust.

¹² This effect was calculated as a sum of the effects of all the three types of stratification.

differences in their stratification mechanisms which essentially matter in the process of eliciting trust by the state.

In the case of interpersonal trust, the prevailing trend is that more decommodification and less stratification will lead to more trust. The effect of the welfare state is hence strongest for the social democratic regime and weakest for the liberal regime. This however does not allow one to explain why interpersonal trust is found almost identical between continental and liberal states since the calculated effects differ substantially. A simplest explanation might be the fact that the variation of trust at the aggregated level is not solely due to welfare states' contextual differences but also due to different age, education or religion composition of their population. In addition, intuition suggests that there might be many other systemic forces that shape trust at the aggregated level: fractionalization or country's well-being, for instance. An additional research is hence necessary to identify whether the effects of outcomes of the welfare state intervention hold true when controlling for other covariates describing macro-level processes that substantially vary across countries. An insight into the causal mechanism of decommodification and stratification effects on trust would be also fruitful which would help enrich the theory about the way in which the state shapes an individual's attitude formation and change.

6. Conclusions

This study represents an empirical investigation of the welfare state effects on social trust. The contribution consists of introducing an outcome spectrum in the analysis of the relationship between social policies and trust. The analysis is based on disentangling Esping-Andersen's welfare regime typology and directly relating levels of decommodification and stratification to trust indexes.

The results are generally supportive of the assumption that the conventional measures of the welfare state development (that is, social spending) do not capture the extent to which the state interfere into an individual's well-being on the one hand, and the ways in which social security systems may shape interpersonal relations in the society, on the other. The new approach based on decommodification and stratification measures as a cornerstone of the empirical analytical framework provides a fruitful insight into impacts the state conducts on trust formation. The results are largely in line with the previous findings that indicate that the generosity of social policies mostly enhance trust accumulation while one should be aware of the institutional framework in which the provision of social benefits is embedded.

The impact of the outcome dimension should be considered a product of both decommodification and stratification. Along with decommodification, stratification mechanism can hence be regarded as an effective instrument of trust manipulation. Thus, it is possible to say that the recent trend towards liberalism might result in a decline of trust. For interpersonal trust, the effect will be joined, since lower levels of decommodification and a stigmatizing-like approach of stratification mechanisms could ruin an individual's trust in other people. For institutional trust, negative impact of liberal paradigm will stem mostly from reduced decommodification levels.

Nevertheless, one can contest the possibility of separating their effects from each other especially in the case of decommodification indexes and the universalism measure of stratification. Moreover, one should be very cautious with results interpretation and it must be recognized that causal claims can only be made to a very limited extent. The latter is mainly due to the limited number of countries in the study (18), which could pose a serious threat to the accuracy of the estimates of decommodification and stratification indicators.

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