

Welfare Alterity on Religious Alterity— Religious Factors of Income-Redistribution Rate

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Introduction

“How should we redistribute our income?” This question about justice has been considered at least since Aristotle’s *The Nicomachean Ethics*, which discussed “Distributive Justice” ⁽²⁾. Even now, we are facing and arguing this question as follows:

- As a global argument, we can give an example on the idea of redistribution proposed by Anthony Giddens in his *The Third Way*, argued between Giddens and Ralf Dahrendorf (Giddens 1998; Dahrendorf 1999; Giddens 2000) ⁽³⁾.
- As a local argument, we can give examples on the “working poor” in the United States (Shipler 2004), the income disparity in Japan (Tachibanaki 1998; Satoh 2004), and so on.

However, in order to consider this question properly, we have to know how we can conduct *sustainable* redistribution (*i.e.* how we can *keep* our redistribution rate *stably at the level we once agreed on*) in contemporary society. In order to know this, we have to consider a factual question: “What are the main factors which have affected the redistribution rate in contemporary society (or, typically, so-called ‘developed’ countries)?”

The ultimate purpose of this paper is to answer this factual question. Our conclusion will be: “One of the main factors is religious alterity.”

The Results of Previous Studies

In previous studies, the literature on comparative welfare state has detected the factors which affect the redistribution rate of OECD-DAC-member countries (*i.e.* the countries which make it their mission, as “developed” countries, to internationally redistribute their wealth to “developing” countries).

In the literature, the redistribution rate has been measured by:

- “social-transfer ⁽⁴⁾ rate (as a percentage of GDP)”,
- “social-security-benefit rate (as a percentage of GDP)”
- “social-security-expenditure ⁽⁵⁾ rate (as a percentage of GDP)”,
- “general-government revenue rate (as a percentage of GDP)”, *etc* ⁽⁶⁾ ;

while the significant factors which affect the redistribution rate have been listed as follows (Esping-Andersen 1990; Huber et al. 1993; Firebaugh and Beck 1994; Huber and Stephens 2001; Swank 2002; Brooks and Manza 2006):

- “aged-people ratio (*i.e.* percentage of population 65 years and over)” [whose effect has been estimated to be *positive* to redistribution rate] (The original source of updated data: OECD),
- “GDP per capita” [*positive*] (OECD),
- “unemployment rate (%)” [*positive*] (ILO),
- “union-membership ratio (%)” [*positive*] (OECD),
- “the importance of non-majoritarian institutions (scored 0-8)” [*negative* (Huber and Stephens 2001: 68-76; Swank 2002: 87)] (Huber et al. 2004),
- “direct-investment-outflows rate (as a percentage of GDP)” [remaining to be examined on “developed” countries (Firebaugh and Beck 1994: 649)]

(Swank ⁽⁷⁾),

- “the cabinet share of Left parties (from 0 to 1)” [*positive*] (Huber et al. 2004),
- “women’s-labor-force ratio of the previous year (as a percentage of total labor force)” [*positive*] (OECD), and
- “the cabinet share of Christian Democratic parties (*i.e.* Catholic parties or Catholic-Protestant-combined parties) (from 0 to 1)” [*positive*] (Huber et al. 2004),

all of whose updated data are available from the data set of Huber et al. (2004).

Moreover, Philip Manow added, to the above list, “(the importance of Calvinism” as a significant (and *negative*) factor of “social-expenditure rate”. This “Calvinism” is a dummy variable which is scored “1” if more than 15% of population belonged to a reformed Protestant denomination around 1960; otherwise “0” (Manow 2004).

To supplement this statistical argument of Manow’s, Sigrun Kahl presented the historical explanation about how Christian denominations (*i.e.* Catholicism, Lutheranism, and Calvinism) have affected the customs of poor relief (or poverty relief), and how the said customs have affected the redistributive institutions in Western countries (which reproduce people’s attitude to redistribution). In short, Catholicism has restrained the secularization of poor relief, Lutheranism has promoted the secularization of poor relief, and Calvinism has restrained poor relief itself (Kahl 2005; forthcoming) ⁽⁸⁾.

Kahl’s historical explanation can be supported by the result of a statistical analysis ⁽⁹⁾ that indicates that the variable of “people’s preference (*i.e.* positive attitude) to redistribution” is significant (and *positive*) and more effective to “social-expenditure rate” than the other significant

variables listed above except for “Calvinism” (Brooks and Manza 2006).

Remaining Problems

Then, how strong are the effects of Christian denominations on today’s redistribution rate? The answer to this question will enable us to find out how we can treat this religious effects and how we can conduct *sustainable* redistribution in our contemporary society. In order to measure the effects of Christian denominations on today’s redistribution rates, we have to examine the significance of “Lutheranism” and “Calvinism” *at the same time*, as well as the variables listed above. However, this examination has not been explored yet.

Purpose

So, the concrete purpose of this paper is to try this examination. Within it, the dependent variable is the income-redistribution rate of “developed” countries which have Catholic, Lutheran, or Calvinist majority in the population. The independent variables are those listed above (including “Calvinism”) plus “Lutheranism”.

We will examine the relations between dependent variable (redistribution rate) and religious independent variables (“Christian Democratic parties”, “Lutheranism”, and “Calvinism”), and will conclude that these relations have been statistically significant especially since the 1980s, and that the relations are irreversible, successive, probable, conditional, and substitutable.

Data and Methods

For this examination, we analyze cross-section time-series data (*i.e.* panel data), across the 1960-2000 period, on 17 OECD-DAC-member countries (*i.e.* “developed” countries) which have Catholic, Lutheran, or

Calvinist majority in the population ⁽¹⁰⁾ and also whose data are available in Huber et al. (2004) ⁽¹¹⁾. The details and sources of the variables will be described in the next section.

The analysis of these data requires a cross-section time-series analysis (*i.e.* panel analysis), especially by the estimation with “constant” and “one-way fixed effects”. The reason of this is the following (Kitamura 2005: 59-80; Sakamoto 2007):

1. There may be some potential independent variables other than those listed above, so we have to introduce “constant” and “fixed or random effects (of each agent or time)” into the estimation. “Constant” is the regular effect detected for every agent (*i.e.* every country in our data) at every time (*i.e.* every year) in the estimation period.
2. The samples (or agents) of our data (*i.e.* 17 countries) were not randomly sampled but completely counted (with nonsampling errors), so we have to introduce not “random effects” but “fixed effects”.
3. These potential independent variables should be applicable to our contemporary and/or future society, that is, they should transcend time. So, their “fixed effects” should be not “two-way” (*i.e.* both for agents and times) but “one-way” (*i.e.* only for agents).

Now, let k be the number of the listed independent variables (=11), N be that of the countries (=17), and T be that of the years. If N is small enough (like 17 in our data), then, for the estimation with “constant” and “one-way fixed effects”, we can use Least Squares Dummy Variable Model (LSDV), which is formulated as follows:

$$\begin{aligned}
 [\text{dependent variable}]_{it} &= [\text{constant}] \\
 &+ [\text{coefficient}_1] [\text{independent variable}]_{it} \\
 &+ \dots \\
 &+ [\text{coefficient}_k] [\text{independent variable}_k]_{it} \\
 &+ [\text{idiosyncratic error as the fixed effect of Agent}]_i \\
 &+ [\text{remainder disturbance}]_{it} \\
 &\text{for } i = 1, 2, \dots, N; t = 1, 2, \dots, T,
 \end{aligned} \tag{1}$$

that is,

$$y_{it} = \alpha_0 + \beta_1 x_{1it} + \dots + \beta_k x_{kit} + \alpha_i + \varepsilon_{it} \quad i = 1, 2, \dots, N; t = 1, 2, \dots, T; \varepsilon_{it} \sim iid(0, \sigma^2). \tag{2}^{(12)}$$

Then, the coefficients $\beta_1 \dots \beta_k$ are estimated (as $\hat{\beta}_1 \dots \hat{\beta}_k$) by making

$$\begin{aligned}
 \sum_{i=1}^N \sum_{t=1}^T \varepsilon_{it}^2 &= \sum_{i=1}^N \sum_{t=1}^T \left\{ (y_{it} - \bar{y}_i) - E[y_{it} - \bar{y}_i] \right\}^2 \\
 &= \sum_{i=1}^N \sum_{t=1}^T \left[(y_{it} - \bar{y}_i) - \left\{ \hat{\beta}_1 (x_{1it} - \bar{x}_{1i}) + \dots + \hat{\beta}_k (x_{kit} - \bar{x}_{ki}) \right\} \right]^2
 \end{aligned} \tag{3}$$

the least.

In addition, α_0 and α_i are estimated as:

$$\hat{\alpha}_0 = \min(\bar{y}_i - \hat{\beta}_1 \bar{x}_{1i} - \dots - \hat{\beta}_k \bar{x}_{ki}), \tag{4}$$

$$\hat{\alpha}_i = \bar{y}_i - \hat{\beta}_1 \bar{x}_{1i} - \dots - \hat{\beta}_k \bar{x}_{ki} - \hat{\alpha}_0 \tag{5}$$

(Kitamura 2005: 4-12, 59-80; Sakamoto 2007).

For this estimation, I used the statistical computer software SPSS 16.0 J for Windows (with Advanced Models), referring to Liu et. al (2005: 174-85, 204-15)⁽¹³⁾. In order to examine the temporal change in the effect of each variable, I conducted this analysis for each period of 1960-1969, 1970-1979, 1980-1989, and 1990-2000 (so, $T=10$ or 11).

Table 1 Panel Analyses on Redistribution Rate ⁽¹⁴⁾

Period	1960-1969			1970-1979			1980-1989			1990-2000												
	T	B	tR	T	B	tR	T	B	tR	T	B	tR										
<i>Dependent Variable</i>																						
<i>Constant</i>	-4.55	-14.67	-9.78	-30.22	1.34**	1.80*	2.75*	3.73**	-6.27	10.84	42.46**	21.80**	0.48	-25.38*	12.98*	27.80**	10.25	34.07**	56.29**	27.69*	-3.76	
Aged People	<0.01	<0.01	<0.01	<0.01	0.95*	0.73	-1.58*	0.36	>0.01	<0.01**	<0.01**	<0.01**	0.16	2.69**	-0.12	2.80**	0.87	-0.93	-2.72**	0.87	1.37	
GDP per capita	0.24	0.36	0.36	0.27	0.45**	0.29*	0.03	0.21	0.45**	0.29*	0.03	0.21	0.47**	0.24	0.70**	0.28**	0.39**	<0.01**	<0.01**	<0.01	<0.01	
Unemployment	-0.03	0.02	-0.18	-0.14	0.13**	0.10	0.21**	0.23**	0.13**	0.10	0.21**	0.23**	0.17**	0.14	0.09**	0.16**	0.22*	0.66**	0.51**	-0.07	-0.12	
Non-majoritarian Institutions	-0.12	-0.13	-0.87	0.10	0.78**	-0.64	-2.53**	-1.30*	0.78**	-0.64	-2.53**	-1.30*	0.50*	1.29*	-0.39	-1.53**	-0.19	-0.13*	-0.07	-0.07	-0.01	
Direct Investment	-0.47	-0.47	2.09	0.78	0.24	-0.36	-2.09**	-1.64*	0.24	-0.36	-2.09**	-1.64*	-0.15	-0.01	0.09	0.20	-0.03	-0.11	-0.21*	0.02	-0.22	
Outflows	0.02	0.53	-0.51	1.11	-1.05**	-1.52*	-1.32*	-1.46*	-1.05**	-1.52*	-1.32*	-1.46*	-0.09	-1.38	-0.32	-0.52	0.35	0.28	0.29	2.17**	3.50**	
Left Parties	0.01	0.14	0.19	0.53*	-0.03	-0.18	-0.12	-0.17	-0.03	-0.18	-0.12	-0.17	0.02	-0.06	0.02	0.12*	0.04	-0.20	-0.13	-0.13	0.26	
Women's Labor	1.31	3.63	4.26	7.62*	0.22	-5.86	-2.19	1.59	0.22	-5.86	-2.19	1.59	-3.08**	0.39	-3.42**	-2.94*	-1.31	3.64	8.61	4.99	19.65**	
Force of Christian Democracy	-4.01	-4.48	7.89	-0.79	-2.55	3.07	11.62**	16.72**	-2.55	3.07	11.62**	16.72**	-3.73	5.32	5.77**	2.80	9.16	23.81**	33.36**	17.47**	16.13	
Lutheranism	-4.63*	-4.39	3.44	4.24	-5.12*	-1.84	[4.98]**	[2.95]**	-5.12*	-1.84	[4.98]**	[2.95]**	-4.99**	-3.47	-6.07**	-1.72	-0.13	2.21	-6.64	-8.40	-1.30	
Calvinism																						

Results

The results of our analyses are shown in Table 1, in which:

- “T” is “social-transfer rate” (OECD data in Huber et al. (2004)),
- “B” is “social-security-benefit rate” (ILO data covering 1960-1989 in Huber et al. (2004), with the Italian data of 1982, 1983, 1987, 1988, and 1989 corrected by ILO (2001)),
- “E” is “social-security-expenditure rate” (OECD data covering 1980-2000 in OECD (2007)),
- “tR” is “general-government tax-(including social security)-revenue rate (as a percentage of GDP)” (OECD 2007),
- “R” is “general-government revenue rate” (OECD data in Huber et al. (2004))⁽¹⁵⁾,
- “Lutheranism” is a dummy variable which is scored “1” if more than 50 % of population belonged to a Lutheran denomination around 1970; otherwise “0” (Barrett 1982)⁽¹⁶⁾,
- “Calvinism” is a dummy variable which is scored “1” if more than 25% of population belonged to a Reformed denomination⁽¹⁷⁾ around 1970; otherwise “0” (Barrett 1982)⁽¹⁸⁾,

and the other independent variables are those listed in the section of “The Results of Previous Studies”.

The summary of the results shown in Table 1 are the following:

- [1] The effect of “aged-people ratio” decayed in the 1970s.
- [2] The effects of domestic economic variables of “GDP per capita” and “unemployment rate” emerged in the 1970s and decayed in the 1990s.
- [3] The effects of religious variables of “Christian Democratic parties

(mainly Catholic parties)”, “Lutheranism”, and “Calvinism” emerged in the 1970s and became stable (in line with Kahl’s previously mentioned historical explanation) in the 1980s.

[4] The effects of the other variables and constant were only unstable.

As for [3], we should note that there are two positive coefficients (enclosed figures) in “Calvinism” row, which are inconsistent with Calvinist poor-relief tradition. But these coefficients concentrate in the 1970s, when the effects of religious variables emerged. So we can think that the effects were unstable in the 1970s and became stable in the 1980s, just as the effect of “aged-people ratio” became unstable (*i.e.* got reversely negative) in the 1990s.

Such stable effects of religion on redistribution rate from the 1980s can be observed visually in Figure 1 and 2, which show the redistribution rates classified by three Christian denominations: the black lines

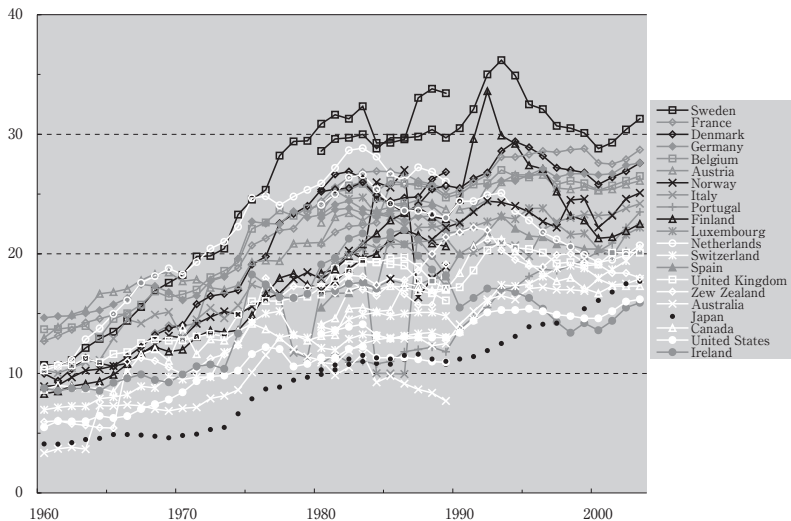


Figure 1 Social-Security-Benefit/Expenditure Rates Classified by Denominations ⁽¹⁹⁾

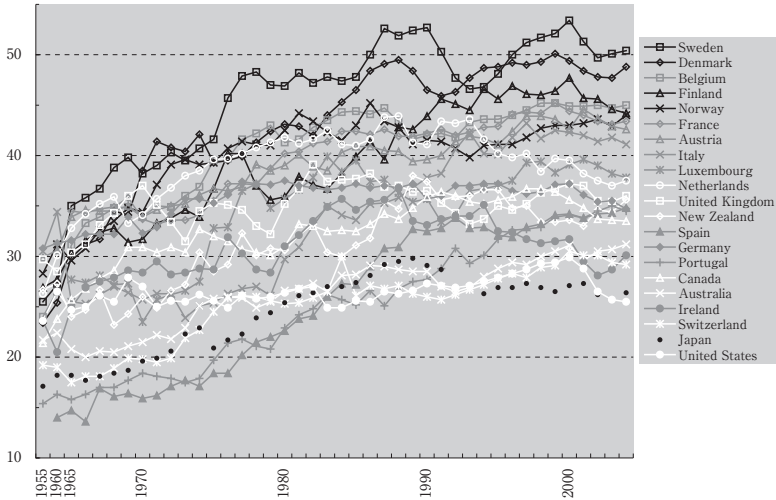


Figure 2 Tax-Revenue Rates Classified by Denominations ⁽²⁰⁾

indicate Lutheran countries, the gray lines Catholic, and the white lines Calvinist (and besides the black dots indicate Japan). These figures show that, in redistribution rate, three denominational groups had had the same tendency of increase until the 1970s, but they have had different tendencies since the 1980s: Lutheran countries have come to rank higher, Catholic countries have kept to rank widely, and Calvinist countries have come to rank lower.

Discussion

Then, why did religion strengthen its effect on redistribution rate in the 1970s and the 1980s ([3])? To this question, the results of [1] and [2] are suggestive. According to [1] and [2], the effect of “aged-people ratio” decayed in the 1970s, and the effects of domestic economic variables (“GDP per capita” and “unemployment rate”) emerged in the 1970s and decayed in the 1990s. These mean the following:

[1+] Until the 1960s, nation-states had been supporting the basic livelihood of *all* the nation's people *regardless of* the domestic economic condition ([1]). This can be named "welfare policy based upon classical nationalism".

[2+] But, in the 1970s, nation-states weakened the said welfare policy, and instead started supporting the basic livelihood *mainly of* the nation's people who could contribute to the domestic economy (*i.e.* labor) *as far as* the domestic economy could afford to do ([2]). This means the decay of classical nationalism in the 1970s. Thus, this can be named "welfare policy based upon domestic economy influenced by the change in nationalism".

[3+] Moreover, from the 1980s to the 1990s, nation-states weaken the said welfare policy, and instead started supporting the basic livelihood of the nation's people *based upon* religiously-rooted tradition of poor relief ([3]). This can be named "welfare policy based upon religious nationalism".

According to Benedict Anderson, classical nationalism⁽²¹⁾ (which appeared at the end of the 18th century, because of the developments of capitalism concerning transportation and communication) was the movement which regulated the identity of people into a nationality (which integrated various ethnicities⁽²²⁾) by establishing a standard language and universal education and by granting citizenship (including the support for basic livelihood, or welfare) to *all* the nation's people (or *everyone* counted up in the census).

Nonetheless, since the beginning of the 20th century, especially

since the 1970s, the further developments of capitalism concerning transportation and communication enabled people to live transnationally, which, regarding the identity of the people, weakened the importance of nationality and thus relatively strengthened the importance of ethnicity (including religion). In this way, especially since the 1970s, classical nationalism has been disorganized by ethnic (or religious) nationalism. Ethnic (or religious) nationalism is the movement which keeps the identity of people within the context of ethnicity (or religion) and pursues its ethnic (or religious) ideals through the activity of the people in *unspecified* nation-states (*i.e. transnationally*)⁽²³⁾ (Anderson 1998: 29-45, 58-74).

According to Sigrun Kahl, each Christian denomination politically maintains its own tradition of poor relief in Western countries (Kahl 2005; forthcoming). Hence, it is thought that ethnicity in Western countries contains Christian denominations, and so ethnic nationalism in Western countries contains a religious nationalism based upon Christian denominations.

Thus, it is thought that, because of the developments of capitalism concerning transportation and communication, “welfare policy based upon classical nationalism” has decayed since the 1970s, and instead “welfare policy based upon religious nationalism” has risen since the circa 1980s in Western countries. [*Hypothesis a*]

Conclusions

Therefore, the relations between dependent variable (redistribution rate) and religious independent variables (“Christian Democratic parties”, “Lutheranism”, and “Calvinism”), which are supposed by Kahl’s historical explanation, have been statistically significant since the 1980s, and, especially since the 1990s, more significant than other variables. These relations are:

- irreversible, successive (because religion can historically form the religiously-rooted tradition of poor relief, and then the tradition can affect redistribution rate),
- probable (because these relations are only probabilistic at 1% level of statistical significance),
- conditional (because these relations are observed only from the 1980s and so seem to depend on the historical and local condition of [*Hypothesis α*]), and
- substitutable (because, for instance, Japan's redistribution rate is the nearly lowest of those of "developed" countries recently, although Japan's population does not have a Calvinist majority).

Last of all, we may foresee two possible ways in the future. They are as follows:

- (1) One way may be to maintain a religiously-rooted tradition of poor relief which is common (or dominant in fact) in each region or nation-state. (Redistribution based upon *communitarianism* or *nationalism*)
- (2) The other way may be to liberalize (or guarantee the individual's chance for) the choice of redistribution rate. (Redistribution based upon *liberalism*)

If so, which way will be more *sustainable*? Considering that religious nationalism will become more and more transnational (and thus trans-regional) in the future, the dominating power of the dominant religion in each region or nation-state will become weaker and weaker, and so the regional or national redistribution of (1) will become more and more difficult and, eventually, change into trans-regional or transnational

redistribution as a case of (2). This means that (2) will be more *sustainable* than (1) from now on.

In relation to this, we are prompted to ask ourselves how we can liberalize the choice of redistribution rate or how we can conduct trans-regional or transnational redistribution. These questions in particular still remain to be discussed.

Notes

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- (2) “... justice in distributing common property always conforms with the proportion we have described (since when a distribution is made from the common stock, it will follow the same ratio as that between the amounts which the several persons have contributed to the common stock)” (Aristotle, *The Nicomachean Ethics*, 1131b28-31=1990: 273).
- (3) Giddens’ Third Way is the way which goes between the high-redistribution way (for equality of both opportunity and outcome) and the low-redistribution way (for equality of only opportunity). So, it is the middle-redistribution way which aims to “maximize equality of opportunity ... [*but*] preserve a concern with limiting inequality of outcome too” (Giddens 2000: 53), to “offer a hand-up, not a hand-out ... [*that is,*] place a prime emphasis on the labour market” (Giddens 2000: 106), and to “help mobilize their [*i.e. the disabled’s, the sick’s, etc*] action potential and reduce dependency” (Giddens 2000: 109). But, according to Dahrendorf, the “Third Way is not about either open societies or liberty,” because it involves “the strict insistence on everyone, including the disabled and single mothers, working” (Dahrendorf 1999: 27). This argument ends up in the question whether we should compel everyone to work or not, which still remains to be discussed.
- (4) Benefits for sickness, old-age, family allowances, *etc* (but not for housing or education), social assistance grants and welfare (Huber et al. 1993: 724; 2004 codebook: 6).
- (5) Benefits plus administrative expenses and transfers to other schemes (Huber et al. 2004 codebook: 4).
- (6) On the other hand, the data of “the effect of redistribution measured by Gini coefficient” is too little to analyze in time series (Pontusson 2005: 36, 40).
- (7) Duane Swank, “21-Nation Data Set on the Comparative Political Economy of

Advanced Industrial Democracies, 1955-1999," Wisconsin: Department of Political Science, Marquette University, 2002.

(8) According to Kahl (2005; forthcoming) (and Manow (2004) on the timing of social protection programs):

- In the Middle Ages, Christians thought that salvation could be attained by good works, such as relieving the poor, who shared the poor image with Jesus Christ and thus whose prayer for the salvation of the relievers was thought to be effective.

- And, after the Reformation:

[1] Catholics persisted in tradition of good works, so they opposed the secularization of poor relief to conserve the individual and voluntary nature (or the aspect of good works) of the traditional poor relief. Thus, in Catholic countries: [1-1] Both outdoor relief and indoor relief in hospitals continued. [1-2] Social protection programs (*i.e.* national aid in sickness, unemployment, *etc*) began late (between the late 1880s and the early 1910s). [1-3] Social assistance (*i.e.* a national last resort safety net), in some countries, began very late (from the late 1970s) with the system fragmented and ungenerous, while, in the other countries, it has not began yet.

[2] Lutherans thought that salvation could be attained only by faith. So they opposed the tradition of good works and secularized poor relief to eliminate the individual and voluntary nature from poor relief. Thus, in Lutheran countries (including Germany): [2-1] Indoor relief in hospitals which receipt individual donation was restricted into the care for the sick and the weak (from 16th c. Ger. and Den., *etc*). Outdoor relief was secularized (or conducted by the secular authority or state) (in 16th c. Ger. and Den., 17th c. Swe., *etc*). [2-2] Social protection programs began very early (between the early 1880s and the mid 1890s). [2-3] Because of the richness of social protection programs, social assistance began late (from the early 1960s) but with the system unitary and generous.

[3] Calvinists thought that salvation could be attained only by God's unconditional election, which was not obvious and thus unpredictable to us until the Last Judgment. Then, the principle of understanding an economic success as the sign of God's election first appeared among the Calvinists in 17th century England, Netherlands, and North American colonies. On this principle, (not good works of poor relief but) wealth is a sign of salvation, and poverty is a sign of damnation. Thus, Calvinists there came to give more priority to multiplying their own individual wealth than to Catholic-like individual voluntary poor relief or Lutheran-like national obligatory poor relief. So, in Calvinist countries: [3-1] Workhouses, where the poor were urged to work, were established earlier than other countries (in 16th c. Eng. and Neth., 17th c. Nor. Amer., *etc*). Individual

- donations for outdoor relief and indoor relief in hospitals were forbidden, whereas those for workhouses were allowed (in 16th c. Eng., 19th c. US, *etc.*). Workhouses increased much more than other countries, and some workhouses had been operated until the late 20th c.. [3-2] Social protection programs began very late (between the late 1890s and the late 1920s). [3-3] In order to compensate the lack of social protection programs, social assistance began very early (from the mid 1930s) but with the system fragmented and ungenerous.
- (9) This analysis was by Ordinary Least Squares estimation with robust-cluster standard errors.
 - (10) That is, more than 50% of population belonged to Catholic, Lutheran, or Calvinist denomination around 1970 (Barrett 1982).
 - (11) These 17 countries are those shown in Figure 1 except Japan, Portugal, Luxembourg, and Spain.
 - (12) “ $(0, \sigma^2)$ ” means “is independent and identically distributed, with the mean 0 and the variance σ^2 (population variance)”.
 - (13) In the estimation, I fixed the “fixed effects of agents” at the last (*i.e.* after “constant” and “independent variables”) in order to obtain the coefficients of all the “independent variables”.
 - (14) Constants and coefficients estimated by Least Squares Dummy Variable Model. * $p < 0.05$, ** $p < 0.01$. The coefficients of the fixed effects of agents are omitted in this table, because we don't intend to examine these fixed effects.
 - (15) OECD website explains the difference between “tax revenue” (tR) and “revenue” (R) as follows: “Tax receipts of the government sector are defined as the sum of direct taxes on household and business sectors, indirect taxes and social security contributions. Non-tax receipts include operating surpluses of public enterprises, property income, user charges and fees, other current and capital transfers received by the general government. Data refer to the general government sector, which is a consolidation of accounts for the central, state and local government plus social security.”
(http://www.oecd.org/document/25/0,3343,en_2649_34245_33702745_1_1_1_1.00.html#t_26,2008.1.1)
 - (16) The countries scored “1” are: Sweden, Denmark, Norway, and Finland.
 - (17) The denominations which were at least partly influenced by Calvinist predestination, that is, Reformed Church, Presbyterian Church, Church of England, Anglican Church, Particular Baptist, Church of Ireland, United Church of Canada, and Uniting Church in Australia.
 - (18) The countries scored “1” are the same as those in “Calvinism” in Manow (2004), as follows: United States, Canada, Australia, Switzerland, United Kingdom, New Zealand, and Netherlands.

- (19) The lines and dots covering 1960-1989 are social-security-benefit rates, ILO data in Huber et al. (2004) with the Italian data of 1982, 1983, 1987, 1988, and 1989 corrected by ILO (2001), and those covering 1980-2003 are social-security-expenditure rates, OECD data (OECD 2007).
- (20) The data is from OECD (2007).
- (21) In this paper, according to Anderson's broad wording, "nationalism" means "the movements for political independence (ultimately nation-building) of one's own group".
- (22) According to Anderson, the category of the ethnic was "originally devised a century ago, in a pre-welfare age, to monitor disdainfully the flows of immigrants from different parts of Europe" (Anderson 1998: 43). Thus, in this paper, according to Anderson's wording, "ethnicity" means "every (imaginary) group identity which was intended to be integrated into nationality". Various pre-national group identities, such as "blood", "culture", "religion", *etc.* can be examples of ethnicity.
- (23) As a typical example of ethnic nationalism, Anderson gives the case that a Jewish-American, Jonathan Pollard, was arrested for the espionage for Israel in the United States in 1985. As for this case, we can say that the substantial number of Jewish-Americans who felt sympathetic to Pollard, as well as Pollard himself, acted or judged based upon not so much their nationality as their (transnational) ethnicity (especially religion in this case) (Anderson 1998: 71).

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