

Welfare State and Local Government: the Impact of Decentralization on Well-Being

**Paolo Addis, Alessandra Coli, and Barbara
Pacini (University of Pisa)**

Discussant

Anindita Sengupta

Associate Professor of Economics

Hooghly Women's College

The University of Burdwan, India

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BACKGROUND

- In recent decades, welfare systems in EU countries have been undergoing continuous reforms in the light of financial pressures.
- In most countries, this has been coupled with decentralization and the increased use of local partnerships and organizations in designing and implementing social policies.
- Decentralization: The devolution of responsibilities from the central government to local bodies (vertical subsidiarity) along with the pluralization of actors involved in the provision of social services (horizontal subsidiarity).

PROBLEM

- The shifting of welfare systems to the local level may have positive or negative consequences.
- Positive consequences: decentralization can provide better impetus for welfare policies to the population specific needs;
- Negative consequences: in the presence of weak supervision by the central government, it may lead to negative implications like territorial fragmentations and inequalities
- Effectiveness of decentralization depends on the national welfare framework and especially on the form of the welfare state. It seems to be most effective in a Social Democratic Welfare State.

OBJECTIVES

- To explore empirically the link between welfare state types - with different degrees of decentralization - and the well-being of citizens in European countries.
- The objective of this analysis is to contribute to a better understanding of the potential effects of decentralization on head count ratio and inequality across countries.

- To this end, the authors have modelled individual binary outcomes (living or not under the poverty line) as a function of both family-level and country-level characteristics.
- The authors have estimated pooled logistic regression and multilevel logit models, for a sample of 127324 households selected in 14 countries, namely Austria, Belgium, Germany, Denmark, Spain, Finland, France, Ireland, Italy, Netherlands, Norway, Portugal, Sweden, and United Kingdom.

DATA AND METHODOLOGY

- For the individual-level variables, they have used EUSILC (EU Statistics on Income and Living conditions) data
- For the country-level variables, they have used ESPROSS (European System of Integrated Social Protection Statistics), NAs (National Accounts), and SOCX (Social expenditure database by OECD) data.
- It is a cross-section data set, including 127324 households for the year 2013.
- There is natural hierarchy within the data: there are observations at the family level nested within the country level. This multilevel structure affects model specification and estimation.

- Three possible strategies to deal with such multi-country datasets:
 - * Pooling the data for all countries and using cluster-robust standard errors.
 - * Using separate models for each country.
 - * Country fixed effects models or multilevel models (also known as random effects models).
- Authors have chosen the first model, i.e. the traditional logistic model using the pooled dataset of all the countries and the third model, i.e. the multilevel model with random intercept for their analysis.

DIFFERENT LEGAL FRAMEWORKS: SOME KEY-ISSUES ON THE RELATIONSHIP BETWEEN DECENTRALISATION AND WELFARE STATE

- Authors have analysed three national legal systems (Germany, Italy, United Kingdom), with different historical, social and legal backgrounds and different forms of state during the period from 2000 to 2013.
- Germany:
- Germany is a federation, with 16 States
- Fundamental social rights are linked to constitutional principles.
- Länder Constitutions contain several references to social rights by the use of ‘concurrent power’. However, this power can be compressed sometimes by the federal state. Länder has power to legislate so long as the Federation has not exercised its legislative power by enacting a law.

- Historically in Germany the local administration had an essential role to ensure the social rights protection. However, in recent decades, there are strong evidences of the opposite.
- Italy:
- Italy is a republic state.
- It adapts the principles and methods of its legislation to the requirements of autonomy and decentralization.
- 4 categories of territorial bodies provided by the constitution: regions, provinces, metropolitan cities and municipalities.
- Legislative powers in Italy are vested in the State and the Regions in compliance with the Constitution and with the constraints deriving from EU legislation and international obligations

- There is a list of matters for which the State has an exclusive competence.
- There is a list of concurrent competences and education, health protection and social security are included in it.
- In the subject-matters covered by concurrent competences, legislative powers are vested in the Regions, except for those, which are laid down in State legislation.

- United Kingdom:
- United Kingdom has no written Constitution.
- The relations between England, Ireland and Scotland were regulated by the so called Acts of Union.
- In last decades, the UK has undergone a transformation of legislative power: Scotland has got the power of taxation through 1998 Scotland Act and
- Whereas, in Ireland, the Northern Ireland Act in 1998, established the Northern Ireland Assembly.
- Scotland and Northern Ireland both have residual legislative powers, mainly in economic and social areas, whereas, some ‘nominated matters’ are reserved to the Westminster regulation. However, position of Northern Ireland is better than Scotland in this matter.

ROLE OF EUROPEAN OFFICIAL STATISTICS IN SOCIAL PROTECTION ACCOUNTING

- The analysis of constitutional provision alone is not satisfactory.
- It is necessary to take into account the way decentralized entities actually implement constitutional provisions.
- The major sources of statistical data in this respect are:
 - ESPROSS (European System of Integrated Social Protection Statistics)
 - SOCX (Social expenditure database) by OECD
 - SSI (Social Security Inquiry) by ILO
- National statistical offices disseminate also micro data on the supply and use of social protection services but they are hardly comparable across the countries.
- EUSILC (EU Statistics on Income and Living conditions).

DIFFERENCES BETWEEN DATA-SOURCES

- There are two main types of difference among these data sources:
- Firstly, related to boundary between social and not-social spending
- Secondly, related to the breaking down of social expenditure among different functions.

EMPIRICAL ANALYSIS

- The authors have tried to define a measure of well-being/poverty (outcome variable), and a set of indicators reflecting the different ways of delivery of social protection services in different countries.

Table 1. Variables and indicators description.

Name	Description	Categories	Data source
POVERTY	Household equalized above or under the poverty threshold (60% of median disposable income)	0=above poverty threshold	EUSILC
		1=under poverty threshold	
HSIZE	Number of members of household	Num	EUSILC
FAMTYPE	Type of household	1= one person	EUSILC
		2= without dependent children	EUSILC
		3= single parent with dependent children	EUSILC
		4= with dependent children	EUSILC
		5= Others	EUSILC
NDEGREE	Number of members with tertiary education	Numeric	EUSILC
NFEM	Number of female members	Numeric	EUSILC
NWORK	Numbers of members with a job	Numeric	EUSILC
NUNEMP	Number of unemployed members	Numeric	EUSILC
NOLD	Number of members aged ≥ 75	Numeric	EUSILC
NKIDS	Number of members aged <16	Numeric	EUSILC

Name	Description	Categories	Data source
BENEFITS	Benefits received by the household over the country average disposable income. Benefits include children, housing, social exclusion and education related allowances as well as unemployment, sickness and disability benefits. Old age and survivors' benefits are not included	Numeric	EUSILC
DECENTR	Decentralization index resulting from Lijphart (1999) factor analysis on the constitutional features and electoral outcomes of 36 different democracies	5-point scale (5 for the most purely federal countries)	Sellers and Lindstrom 2007
BENEFITS_NUTS2	Variation coefficient of Social benefits other than social transfers in kind over disposable income of regions (NUTS 2)- 2011.	Numeric	NAs
KIND_CASH	Ratio of "Social transfers in kind" and "Social benefits other than social transfers in kind"	Numeric	NAs
MEANS_TOT	Share of means-tested benefits over total benefits	Numeric	ESPROSS
PRIVATE_TOT	Share of private social benefits over total social benefits, 2011	Numeric	SOXC
SOC_EXP	Social expenditure per inhabitant in PPS as a percentage of GDP in PPS- 2013	Numeric	ESPROSS
ACTUAL_IND_EXP	Actual individual expenditure of households in PPS as a percentage of GDP in PPS. 2013	Numeric	NAs

Table 2. Country variables values (reference year 2013). Last column: head count ratio, percentage of households under the poverty threshold.

	DECENTR	BENEFITS_NUTS	KIND_CASH	MEANS_TOT	PRIVATE_TOT	SOC_EXP	ACTUAL_I_EXP	HCR
AT	4.50	6.907	0.711	0.083	0.068	0.295	0.703	15.693
BE	3.20	10.141	0.841	0.055	0.065	0.295	0.716	16.415
DE	5.00	15.593	0.802	0.123	0.111	0.296	0.798	16.453
DK	2.00	5.274	0.953	0.360	0.145	0.318	0.736	6.108
ES	2.00	11.702	0.659	0.143	0.019	0.248	0.955	18.000
FI	2.00	8.883	0.980	0.053	0.041	0.309	0.576	12.058
FR	1.30	7.910	0.809	0.110	0.103	0.349	0.792	12.946
IE	1.00	5.075	0.796	0.319	0.079	0.196	0.643	15.807
IT	1.50	9.329	0.550	0.056	0.075	0.294	0.729	17.099
NL	3.00	7.824	0.979	0.133	0.241	0.302	0.561	5.478
NO	2.00	8.847	1.112	0.037	0.090	0.234	0.465	9.915
PT	1.00	7.237	0.600	0.084	0.072	0.272	1.316	18.841
SE	2.00	9.714	1.186	0.027	0.105	0.287	0.492	14.159
UK	1.00	14.024	0.823	0.144	0.215	0.267	0.772	17.361

Data sources: columns 2-7 our computations on EUSILC, ESPROSS, SOCX, and NAs data. Column1, indicator from Lijphart (1991)

REGRESSION EQUATION OF THE ANALYSIS

$$\ln\left[\frac{P_{\bar{u}}}{1 - P_{\bar{u}}}\right] = X_{\bar{u}}' \gamma + Z_{\bar{u}}' u_j$$

- γ contains the so-called fixed effects for individual-level units in the same group; while u_j can be interpreted as the (random) effect of being in group j on the log-odds that $y=1$.
- σ_{2u} is the country-level (residual) variance, or the between-group variance in the log-odds that $y=1$ after accounting for fixed effects. X and Z are the corresponding design matrices.

EMPIRICAL RESULTS

- Empirical analysis is done in two stages:
- First, only with the household-level independent variables and with country random intercept for the multilevel model (results are shown in Table 3 of the paper).
- Second, they estimated a classical logistic regression including household-level and country-level variables (results are shown in Table 4 of the paper) and a multilevel logit model with random intercept and both household-level and country-level fixed effects (results are shown in Table 5 of the paper).
- To overcome inferential shortcomings due to the low number of countries, in the second stage, the authors have used Bayesian MCMC method, in which u is a model parameter, in the same manner as γ , so that uncertainty in its estimates can be naturally evaluated. Credibility intervals at 95% level are computed for all parameters.

Table 3. Logit model and multilevel logit model (only household fixed effects).

	Classical logistic model					Multilevel model		
	Estimate	Std. Error		Cluster-adj. Std. Error		Estimate	Std. Error	
(Intercept)	-1.078	0.022	***	0.126	***	-1.144	0.091	***
HSIZE	0.278	0.019	***	0.045	***	0.288	0.020	***
NDEGREE	-0.670	0.017	***	0.062	***	-0.669	0.017	***
TYPE2	-1.123	0.029	***	0.127	***	-1.130	0.029	***
TYPE3	0.005	0.042		0.122		-0.010	0.042	
TYPE4	-0.643	0.049	***	0.159	***	-0.636	0.049	***
TYPE5	-0.701	0.261	**	0.197	***	-0.697	0.253	**
NFEM	0.062	0.016	***	0.037	.	0.063	0.016	***
NOLD	-0.332	0.020	***	0.059	***	-0.339	0.020	***
NKIDS	-0.009	0.018		0.034		-0.014	0.019	
NWORK	-0.902	0.016	***	0.061	***	-0.906	0.016	***
NUNEMP	0.785	0.019	***	0.068	***	0.774	0.020	***
BENEFITS	-0.477	0.062	***	0.379		-0.512	0.065	***
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1								
Classical logistic model				Multilevel model				
				Random effects:				
				Standard Deviation		0.336		
Null Deviance	104917	Df	127323	Loglik		-44183.5		
Residual Deviance	89538	Df	127311	Residual Deviance		88367.1	df	127310
AIC	89384			AIC		88395.1		

MAIN FINDINGS

- The number of kids does not affect the probability of being a poor family
- The probability of being a poor household is not significantly different in case of Single parent with dependent children (TYPE3) or One-person (TYPE1) families.
- Probability of being a poor household increases with the household size, the number of female members, the number of unemployed members.
- Probability of being a poor family decreases with the number of members with tertiary education, the number of members aged 75 or more, the number of members with a job
- All household types, except those with single parent with dependent children have a lower probability to be poor with respect to the One-person family.
- Benefits received by the household is negative and highly significant both in the cases of classical logistic model and multilevel logistic model with normal standard errors implying significant role of benefits in reducing the poverty, whereas, it is insignificant if the clustered robust standard error is considered.

Table 4. Logistic regression model (both family and country independent variables).

	Estimate	Odds Ratio	Std. Error		Cluster-adj. Std. Error	
(Intercept)	-0.997	0.369	0.134	***	0.581	.
HSIZE	0.275	1.317	0.020	***	0.035	***
NDEGREE	-0.672	0.511	0.017	***	0.063	***
TYPE2	-1.128	0.324	0.029	***	0.106	***
TYPE3	-0.003	0.997	0.042		0.101	
TYPE4	-0.650	0.522	0.050	***	0.179	***
TYPE5	-0.642	0.526	0.261	*	0.316	*
NFEM	0.061	1.063	0.016	***	0.036	.
NOLD	-0.343	0.709	0.020	***	0.055	***
NKIDS	0.001	1.001	0.019		0.031	
NWORK	-0.902	0.406	0.016	***	0.060	***
NUNEMP	0.750	2.117	0.020	***	0.087	***
BENEFITS	-0.395	0.674	0.064	***	0.430	
DECENTR	-0.018	0.982	0.008	*	0.053	
BENEFITS_NUTS2	0.064	1.066	0.004	***	0.026	*
KIND_CASH	-0.046	0.955	0.067		0.176	
MEANS_TOT	-1.130	0.323	0.149	***	0.621	.
PRIVATE_TOT	-0.946	0.388	0.177	***	1.594	
ACTUAL_IND_EXP_C	0.128	1.136	0.062	*	0.156	
SOC_EXP	-1.771	0.170	0.311	***	1.345	
Null Deviance	104917	df	127323			
Residual Deviance	88691	df	127304			
AIC	88731					

Table 5. Multilevel logistic regression model (both family and country-level fixed effects). 95% credibility intervals are reported (lower and upper bound).

Fixed Effects:	Estimate	Est.Error	l-95% CI	u-95% CI
Intercept	0.47	0.13	0.22	0.73
HSIZE	0.06	0.01	0.05	0.08
NDEGREE	-0.10	0.01	-0.11	-0.09
TYPE2	-0.27	0.01	-0.29	-0.24
TYPE3	0.00	0.02	-0.05	0.04
TYPE4	-0.22	0.02	-0.26	-0.18
TYPE5	-0.21	0.11	-0.43	0.01
NFEM	0.02	0.01	0.00	0.03
NOLD	-0.07	0.01	-0.09	-0.05
NKIDS	0.00	0.01	-0.02	0.02
NWORK	-0.16	0.01	-0.17	-0.14
NUNEMP	0.33	0.01	0.30	0.35
BENEFITS	-0.05	0.03	-0.10	0.01
DECENTR	0.00	0.01	-0.03	0.02
BENEFITS_NUTS2	0.01	0.01	0.00	0.03
MEANS_TOT	-0.11	0.18	-0.46	0.25
PRIVATE_TOT	-0.25	0.26	-0.77	0.27
SOC_EXP	-0.29	0.39	-1.07	0.47
Group-Level Effects:				
Standard Deviation	0.05	0.02	0.03	0.09

MAIN FINDINGS

- There is no significant difference between the standard logistic estimate and the multilevel logistic estimate, as far as country-level variables are concerned.
- The variation coefficient of social benefits over disposable income of regions (BENEFITS_NUTS2), is positive and highly significant, which implies that if heterogeneity of social protection within countries increases, probability of being poor increases significantly.

CONCLUSION

Decentralization (measured in terms of territorial inequalities in the provision of social protection) seems not to favour citizens' well-being (having an equalized disposable income above the poverty threshold).

COMMENTS

- It is a well-organised and technically sound paper.
- It has an inter-disciplinary approach, which is praiseworthy.
- However, there are a few points to note:
- Section 2 of the paper is a bit lengthy. This section could have been shorter and specific.
- The authors have included 14 countries for their analysis. However, they have discussed about the structures of three countries only, i.e. Germany, Italy and U.K. Instead of lengthy discussions about these three countries, the authors could have discussed about all the 14 countries in a more precise fashion.
- The poverty is measured in terms of Head Count Ratio. Instead, multi-dimensional poverty index (MPI) could have been used, which is far more efficient to capture the deprivations of people.
- Authors did not describe clearly about the construction of five-point scale of the variable DECENTR. What are these scales?

- Authors have not shown the marginal effects in the empirical results, which is necessary in case of logistic regression model.
- Meaning of the conclusion is not clear. The conclusion says, ‘Decentralization seems not to favour citizens’ well-being’.
- But doesn’t the result suggest that if heterogeneity of social protection within countries increases, probability of being poor increases significantly ?
- Does ‘decentralization’ mean ‘heterogeneity of social protection within countries’?
- It seems that failure of the governments to implement the social protection policies properly has created territorial inequalities which has raised the probabilities of poverty of the households. Effective form of Decentralization would surely be beneficial for the poor. Let’s keep our fingers crossed.

***** **Thank You** *****