Exploring Public Social Expenditure Trends in the Globalization Era

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Abstract:

Triggered by the phenomenon of globalisation, during recent years there has been a process of State policy rationalisation in the social expenditure domain; hence the debate over the present role and dimension of welfare state has intensified. Following on the extensive multidisciplinary literature on this issue, the purpose of this paper is two-fold 1) to apply a traditional analysis of convergence (sigma and beta convergence) in public social expenditures and 2) to analyse public social expenditure allocation expressed as a % of GDP and derive a possible classification of the countries by means of a multivariate approach. Our results, revealing that some convergence in the expenditure domain occurred for certain Southern and Northern European countries, can be interpreted as a further contribution to the literature on contemporary public policy evaluation in the welfare domain.

Key Words: *Policy Making, Public Policy Expenditures, Principal Component Analysis, Cluster Analysis*

JEL Classification*: D7, H50, H53*

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1. Introduction

In recent years a growing body of literature has appeared on the nexus between globalisation and the welfare state. Behind this increasing interest in the role that globalisation is exerting on state policy, there is the idea that it brings about "a loss of power of the nation state, in general, and a reduction in welfare state activities, in particular" (Dreher et.al., 2008, p. 264), which translates into a process of State policy rationalisation in the social expenditure domain. This is an important aspect that reveals how countries are affected by increased international competition. Hence the debate about the present role and dimension of the welfare state has intensified: due to competitive pressure worldwide triggered by the liberalisation of factor mobility, there is downward pressure on welfare programs that may result in a higher homogeneity of social expenditure in the sense of a clear harmonisation of their composition and amount.

However, as Esping Andersen suggested (1990), the welfare domain is a complex area and, clearly, the analysis of its evolution over time requires focus on socio-economic pressures, political parties, political institutions and welfare state structures, and not only on the expenditure trends.

Following on the heterogeneous literature on convergence, we suggest possible similarities that have occurred in the social expenditure models to date. The purpose of this paper is two-fold: 1) to apply a traditional analysis of convergence (sigma and beta convergence) in public social expenditure and 2) to analyse public social expenditure allocation expressed as a % of GDP and derive a possible classification of the countries by means of a multivariate approach. These methodologies can help to support or reject the hypothesis of harmonisation of national social expenditure policies in Europe. We considered a sample of 16 European OECD countries plus the USA (often considered a trend-setter country in the economic policy domain), and used data from the OECD Social Expenditure Database 1980-2001, keeping all variables that define Public Social Expenditure.

The paper is structured as follows: in paragraph 2 we offer a glance to the literature about globalization and welfare expenditures; in paragraph 3 we show data and methodology adopted; par. 4 is dedicated to some descriptive analyses; in par. 5 we analize the trends in social public expenditure by means of sigma and beta convergence; in paragraph 6 we adopt Principal Component and Cluster Analises to investigate on the existence of different expenditure models. Last paragraph is dedicated to few conclusions.

2. Globalization and Welfare Expenditures

The revised role of state intervention, in its form and magnitude, is commonly ascribed to the new competition frameworks triggered by globalisation.

As written in Evans and Cerny :

> *"Globalisation has transformed relationships between the international economy, the state and economic policy, creating new parameters – constraints and opportunities – for trade policy, regulating financial markets, corporate governance, industrial policy, macroeconomic policy and fiscal and monetary policy".* (Evans and Cerny, 2003, p. 19):

This transformation is supported by a neoliberal consensus that tends to promote global competition: hence the idea of a "competition state" that has replaced the concept of "nation state":

> *"with the state increasingly using new forms of economic intervention intended to marketize the state itself as well as to promote the competitive advantage of national, industrial and financial activities within a relatively open world economy"* (Cerny, 1992, p.241).

Since the seminal paper by Pierson (1994), the scholarly debate about the politics of retrenchment has intensified and social scientists have tried to demonstrate whether the dismantling of the welfare state is heading towards convergence or resilience, suggesting that the globalisation process may lead countries to implement similar structures of government spending over time, producing effects in particular on public social expenditures. In other words, competitive pressure may have forced governments to reduce social protection and engage in a "race to the bottom" in welfare state policies. According to Evans and Davies, governments have been restructuring the welfare state, moving away from the industrial-welfare state through the "introduction of a distinctive economic project which embraces the pressures of international markets through the adjustment of domestic as well as foreign economic policies" (Evans and Davies, 1999, pp.-371-373). But among academic political economists, the influence that globalisation has exerted on social systems is amply debated, given that some argue that globalisation has little effect on the size of the welfare state or its funding basis, while others suggest that economic integration increases overall welfare state spending. For example, Keen and Marchand (1997) argue that, to cope with global competitiveness, all governments raise resource allocation for productive expenditures and reduce non-productive expenditures but there is debate about this point (Ferreiro *et al*, 2009). Other scholars (Tanzi and Schuknecht, 2000) underscore that globalisation intensifies fiscal competition and factors mobility, reducing government revenues and, consequently, inducing a decrease in expenditures for social protection. An opposite interpretation of the globalisation effect is put forward by Rodrik (1997), in which enlargement of the public sector serves the purpose of mitigating exposure to external risk perceived by the citizens due to increasing trade openness: which means that globalisation-induced welfare state retrenchment is

mitigated by citizens' preferences to be compensated for the risks of globalisation ("compensation hypothesis") (Dreher *et. al*. 2008). Other scholars ascribe welfare state resilience to institutional inertia and path dependency, due to the stickiness of beliefs and norms that should explain why policy and design institutions have a stake in the framework they created and resist changes (North, 1990). Navarro, Schmitt and Astudillo (2004) wrote that welfare states of most developed countries have not converged during globalisation towards a reduced welfare state but have continued to be different, retaining their individual characteristics, shaped primarily by the dominant political tradition that governed each country during the pre-globalisation period (Navarro, Schmitt and Astudillo, 2004, p. 134).

On the other hand, Sanz and Velazquez (2004) analyse whether the OECD member states have harmonised their composition of government expenditures over the period 1970-1997. They identify two different models that the countries are converging to: the representative and the community model, that differ for the level of welfare and public services and facilities expenditures.

We can conclude that, again, the presence of contradictions implies some ambiguity and leads to rejecting the hypothesis of a univocal link between globalisation and the welfare state:

> *"globalization is not a monolithic exogenous force that impacts directly and with equal impact on nation states, but rather a complex set of ideological and practical processes, some of which are accepted, internalized and acted on by national governments"* (Sykes *et.al*., 2001, p. 197).

As Dreher et al argue, the "efficiency" and "compensation" effects may neutralise each other and it is possible that "the impact of these two effects depends on the type of expenditures" (Dreher et.al, 2008, p. 264); they conclude that globalisation does not affect the composition of government expenditures.

3. Data and Methodology

We consider a sample of 16 European OECD countries: Austria (Aus) , Belgium (Bel), Denmark (Dk), Finland (Fin), France (Fra), Germany (Ger), Greece (Gre) , Ireland (Ire), Italy (Italy), Netherlands (Ned), Norway (Nor), Portugal (Por), Spain (Spa), Sweden (Swe), Switzerland (Sui), United Kingdom (UK) plus the USA that are often considered a trend-setter country in the economic policy domain; we use data on public social expenditures registered for the period 1980-2001 by the OECD Social Expenditure Database. The time interval chosen is particularly interesting for a study on social expenditure trends as it is characterised by strong economic globalisation that, as quoted above, could be interpreted as the reason for the decline (Tanzi, 2000) or rise (Rodrik, 1997) in welfare policies.

Expenditures are grouped in 9 policy areas: Old-age, Survivors, Incapacity-related benefits, Health, Family, Active labour market, Unemployment, Housing and Other (see Tab. 1 for details). As the primary focus of the paper is comparing data on national expenditure levels, we use all variables expressed as a percentage of GDP.

The next paragraph shows simple descriptive analyses carried out on total public social expenditure trends, while in paragraph 5 we carry out the convergence analyses on the whole dataset by means of the well-known measures of σ and β convergence. While with the former we seek to verify whether the dispersion of total social expenditure – and expenditures in each policy domain - is reduced over the time interval examined (Streissler, 1979; Baumol, 1986; Dorwick and Nguyen, 1989; Barro and Sala-i-Martin, 1992), with the latter we try to verify the existence of a negative partial correlation between growth over time in total public social expenditure –and expenditure for each policy domain - and its initial level (Barro and Sala-i-Martin, 1992, 1992; Boyle and McCarthy, 1997).

Following Ferreiro et al (2010), "due to the frequent use of the classical concepts of convergence and the existing criticism regarding the use of β (and σ) convergence" (Ferreiro *et al*, 2010, p. 4) we have extended our empirical work performing a multidimensional analysis on the same data. Principal component Analysis (PCA – Hotelling, 1933) and Hierarchical Cluster Analysis are carried out in paragraph 6; as we show in other papers (De Simone *et al*. 2008) the resulting Factorial Plan and Clusters, automatically generated by the Parti-Decla Procedure of the Decisia software Spad, turn out to be a good means to study the dynamics of public social expenditures..

More in detail, a principal component analysis allows us to interpret the relations between public expenditures in the light of two latent factors resulting from the linear combinations of the original variables, while by means of the Cluster analysis we examine the level of similarity in the countries' choices regarding social expenditures. Countries showing similar expenditure behaviours are incorporated into the same cluster/social expenditure model.

Table 1. Variables, Labels and Descriptions.
For all the variables the source is the OECD Social Expenditure Database

Label	Description
OTH	Other social policy areas. Non-categorical cash benefits to low-income households, other social services. Expressed as a % of GDP
HOUS	Housing allowances and rent subsidies. Expressed as a % of GDP
UNEMP	Unemployment compensation, severance pay, early retirement for labour market reasons. Expressed as a % of GDP
FAM	Family. Child allowances and credits, childcare support, income support during leave, sole parent payments. Expressed as a % of GDP
HEAL	HEAL. Spending on in- and out-patient care, medical goods, prevention. Expressed as a % of GDP
INC	Incapacity-related benefits. Care services, disability benefits, benefits accruing from occupational injury and accident legislation, employee sickness payments. Expressed as a % of GDP
SURV	Survivors. Pensions and funeral payments. Expressed as a % of GDP
OLD	Old-age. Pensions, early retirement pensions, home-help and residential services for the elderly. Expressed as a % of GDP
ACTLAB	Active labour market policies. Employment services, training youth measures subsidised employment, employment measures for the disabled. Expressed as a % of GDP
TOT	Total public social expenditure (sum of previous variables). Expressed as a % of GDP

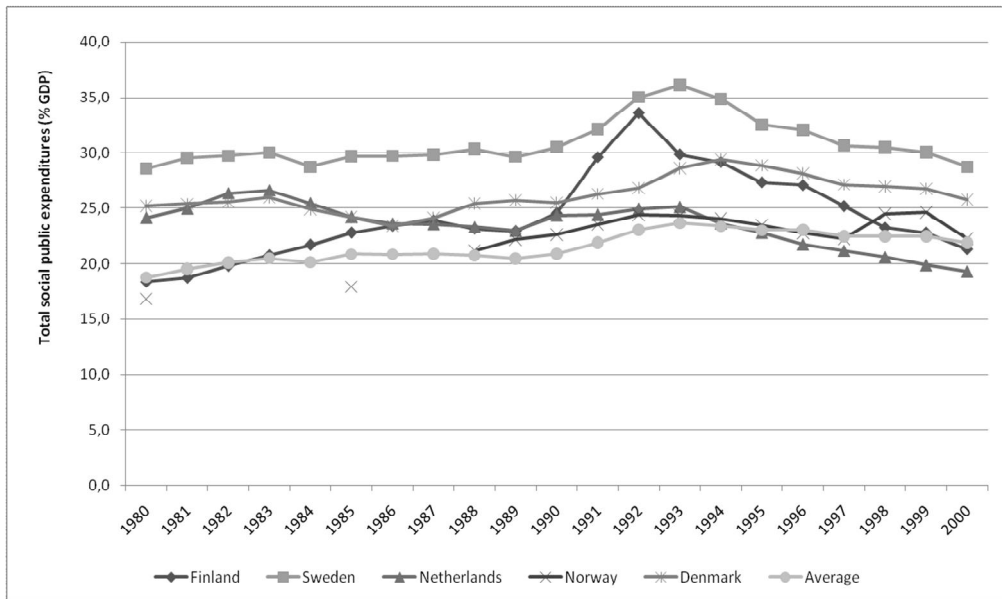**Fig. 1. Social Expenditure Average Trends**
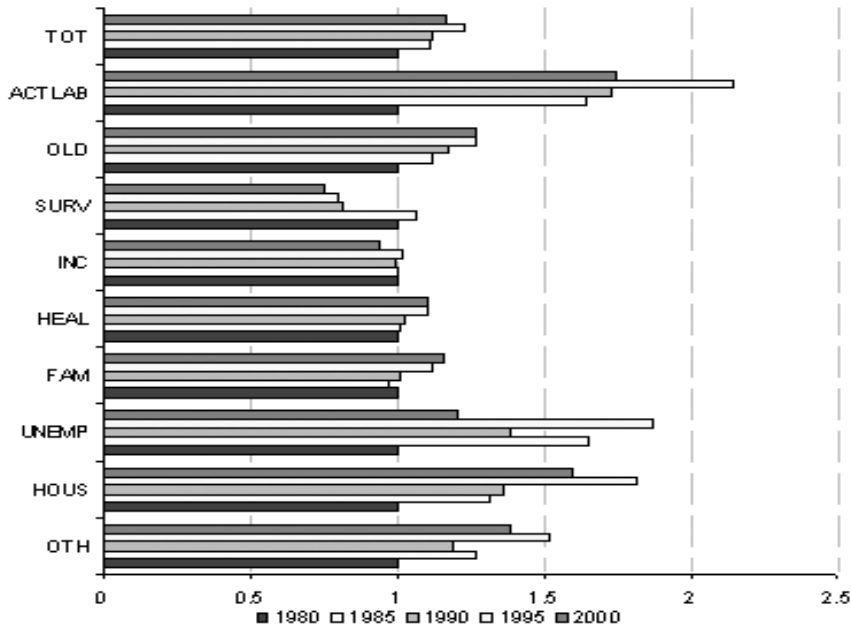
4. Descriptive Analysis

Figure 1 shows the average levels of expenditure registered in our sample for each of the policy domains for 5 of the years studied: 1980, 1985, 1990, 1995, 2000 (with the 1980 values set at 100). Comparing 1980 to 2000, an increase in public social expenditures appears evident, except for the sectors labelled INC and SURV. Therefore, in accordance with Rodrik (1997), it can be argued that, far from declining, average public social expenditures increased during the period considered.

A further look reveals that for three variables (ACTLAB, UNEMP and HOUS) there was a marked expenditure increase from 1980 to 1995, followed by a considerable reduction registered between 1995 and 2000 (ACTLAB : -18.5% ; UNEMP : -35%); for the last period considered, these data seem to be consistent with the "discipline effect" of globalisation (Dreher et.al., 2008).

Figures 2 to 5 show total expenditure (TOT) trends for each of the countries in our sample compared with the average expenditure value. It can be seen that some of the countries in the sample (Greece, Ireland, Portugal, Spain, Switzerland and the United States) are characterised by consistently below-average total expenditure levels over the entire period examined, while total expenditure in other countries (Austria, Belgium, Denmark, France, Germany and Sweden) is always higher than the average; values registered for Norway, Finland, Italy and the Netherlands are at

times higher and at times lower than the average. Two groups of countries seem to show "converging behaviour" over the period considered: on the one hand, Portugal, Greece and Spain show increasing expenditure trends that approach the average levels during the last years, while Sweden and Finland, whose high public social expenditures are in definite decline since 1992, approach the average value. Dysfunctional behaviour characterises Ireland, the only country in the sample that is drifting away considerably from the average expenditure levels[4].

Fig. 2. Total Public Social Expenditure Trends in Finland, Sweden, the Netherlands, Norway, Denmark and the Average Values (1980-2000)

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[4] As we used data expressed as a percentage of GDP, the strong economic growth of Ireland during the 90's (in terms of GDP) can explain this trend.

Fig. 3. Total Public Social Expenditure Trends in Belgium, UK, Ireland and the Average Values (1980-2000)
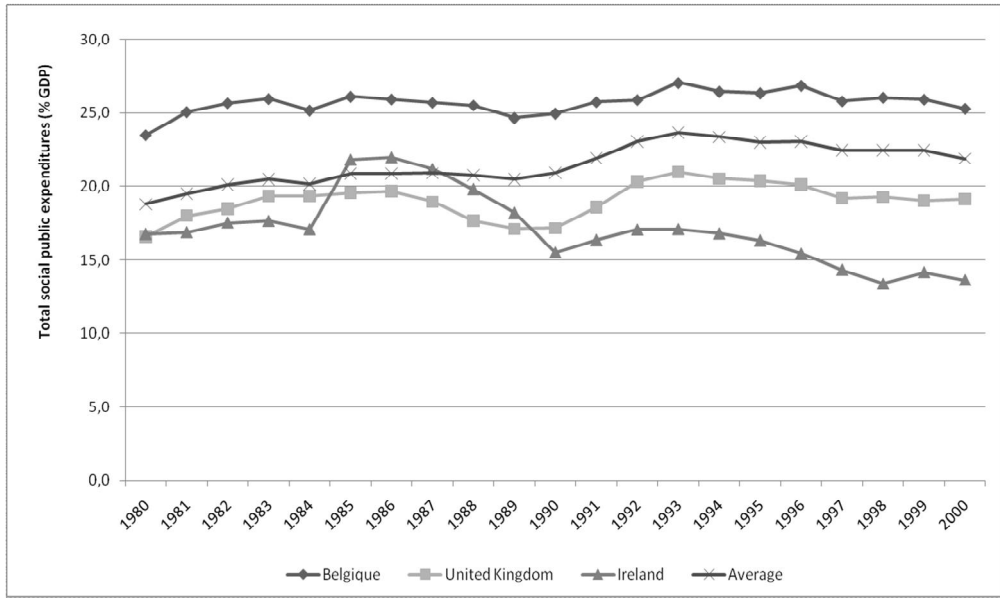

Fig. 4. Total Public Social Expenditure Trends (1980-2000) in Greece, Italy, Portugal, Spain, Switzerland, the USA and the Average Values

Fig. 5. Total Public Social Expenditure Trends (1980-2000) in Austria, France, Germany and the Average Values
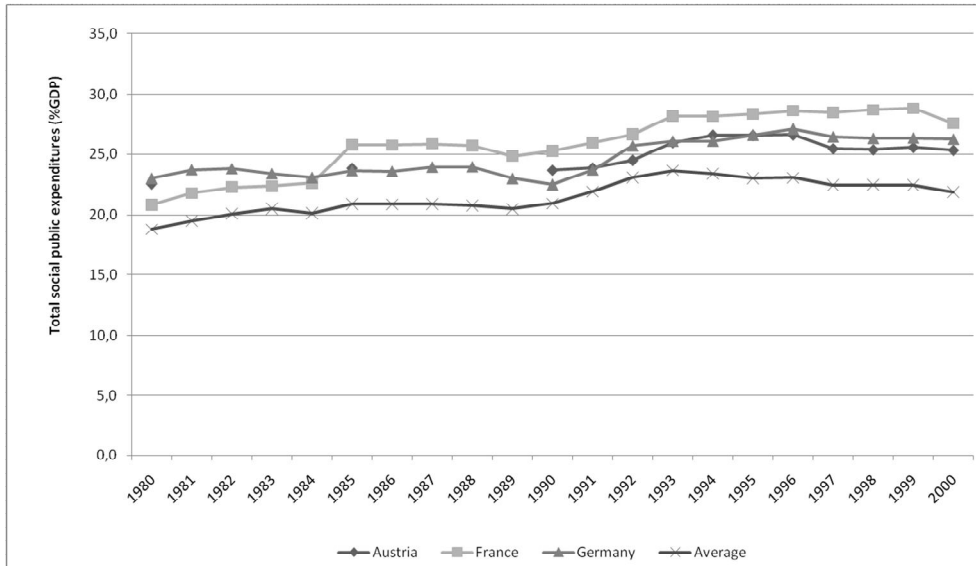
5. σ and (absolute) β Convergence

In the analysis of public social expenditure trends, σ-*convergence* is given by a marked reduction in expenditure variability over time, measured by the coefficient of variation. In Tab. 2 we show the coefficient of variation values calculated for the whole sample in the five different years: 1980, 1985, 1990, 1995 and 2000. Comparing 1980 to 2000, we found a slight reduction in variability for the following variables: unemployment (UNEMP), active labour market policies (ACTLAB), housing (HOUS) and health (HEAL), while for variables like family expenditure (FAM), incapacity (INC) and old age (OLD), we observe constanT values.

Table 2. Coefficient of Variation Values for 1980, 1985, 1990, 1995 and 2000

Variable	1980	1985	1990	1995	2000
OTH	1.068	0.864	0.766	0.736	0.550
HOUS	1.135	1.096	0.979	1.031	0.943
UNEMP	1.219	0.782	0.828	0.660	0.719
FAM	0.571	0.592	0.615	0.605	0.479
HEAL	0.249	0.212	0.201	0.175	0.148
INC	0.499	0.397	0.536	0.451	0.451
SURV	0.629	0.649	0.710	0.726	0.816
OLD	0.308	0.300	0.308	0.317	0.353
ACT LAB	0.903	0.725	0.547	0.641	0.535
TOT	0.273	0.239	0.239	0.217	0.196

To test the absolute β convergence hypothesis, we performed for each variable a cross-section Ordinary Least Square (OLS) regression to estimate the parameters of the following equation:

$$\frac{1}{T}\ln(\frac{S_{it}}{S_{i0}}) = \alpha + \beta\ln(S_{io}) + \varepsilon \qquad [1]$$

where:

S_{it}= public social expenditure (%GDP) in the country i in the year 2000
α = constant
S_{i0}= public social expenditure (%GDP) in country i in the year 1980
T= total time interval (20 years)
ε = error
ln indicates, as usual, the natural logarithm

The results are shown in Tab. 3.

Table 3. Absolute beta convergence. Cross-section OLS regression results (* p<0.01 ** p<0.05 *p<0.1)**

Dependent variable	OTH	HOUS	UNEMP	FAM	HEAL	INC	SURV	OLD	ACTLAB	TOT
Independent variables										
CONSTANT	-0.0239901**	0.00342903	0.00406062	0.0182955***	0.0714659***	0.0111023	-0.0222746**	0.0274056	0.00413837	0.0837932***
	(0.00899)	(0.0166)	(0.00954)	(0.00434)	(0.01139)	(0.00798)	(0.00855)0	(0.02371)	(0.01786)	(0.02095)
lnOTH 80	-0.0335036***									
	(0.00549)									
lnHOUS 80		-0.0114979*								
		(0.00560)								
lnUNEMP 80			-0.0266761***							
			(0.00868)							
lnFAM 80				-0.0186582***						
				(0.00536)						
lnHEALTH 80					-0.0408493***					
					(0.00700)					
lnINC 80						-0.0145303*				
						(0.00765)				
lnSURV 80							0.0179012			
							(0.01250)			
lnOLDAGE 80								-0.00982046		
								(0.01320)		
lnACTLAB 80									-0.0246130	
									(0.01299)	
lnTOT 80										-0.0261307***
										(0.00720)
Number of cases	17	17	17	17	17	17	17	17	17	17
R^2	0.77156	0.25958	0.42047	0.44596	0.69399	0.19362	0.12021	0.03554	0.37421	0.46743

Support for the *absolute β convergence* hypothesis is found for the variables health (HEAL), other expenditures (OTH), unemployment (UNEMP), family (FAM) and total (TOT); for these, regression results show an acceptable value of R^2, while all coefficients are significant and, as expected, have a negative sign.

6. Principal Component and Cluster Analyses

The results of the previous paragraph show convergence for some of the variables considered. Anyway, in order to obtain more detailed information about the position of each country as regards all variables and periods considered, we decided to perform a multidimensional analysis (MDA) by means of a Hierarchical Cluster Analysis based on a Principal Component Analysis (PCA).

The variables considered are the same as for the convergence analysis, without TOT, but we consider the average value in the following periods 80-85; 96-91; 92-96; 97-01. This solution helps to obtain a factorial plan and to reduce the bias of all possible expenditure outliers in a single year.

By the means of PCA we extracted from our dataset the first two factors that explain the 56,6% of the total variance. The first factor is positively characterised by variables that define social policies for the population in working age (see Tab. 3), while the second factor is characterised by social policies for the passive population (see Tab. 4)

Table 4. Printout on Factor 1 by the Active Continuous Variables

Variable label	Coordinate	Weight	Mean	Standard deviation
SURV	-0.32	68	0.999	0.687
MIDDLE AREA				
ACTLAB	0.83	66	0.832	0.52
FAM	0.86	68	1.985	1.118

Table 5: Printout on Factor 2 by the Active Continuous Variables

Variable label	Coordinate	Weight	Mean	Standard deviation
OTH	-0.5	68	0.444	0.325
INC	-0.2	68	2.82	1.243
MIDDLE AREA		68		
OLD	0.66	68	7.32	2.295

Fig 6 illustrates the factorial plan with the projection of the variables considered (arrows), countries in all macro-periods considered (small points) and the centre of the four cluster (big points).

Using the Parti-Decla procedure of Spad, the software itself generates the number of Clusters that maximises the inter cluster inertia and minimises the intra cluster inertia.

The data processing detected 4 clusters that give an idea of the public social expenditure behaviour of the countries considered. We decided to not define clusters according to "traditional" welfare models (Esping Andersen, 1990) because we used only expenditure variables, without institutional variables. The detected clusters are:

- *Cluster 1* (see Tabs. 6 and 7), characterised by a high expenditure level for Health (*T value* 3.29) and Old-age pensions (*T value* 5.49). In this cluster are Germany, France and Austria, while in the last period we also find Greece. This cluster is defined as the "*Continental model*".
- *Cluster 2* (see Tabs. 6 and 8), characterised by a high expenditure level for housing (*T value* 4.33) and survivors pensions (*T value* 2.83). The countries that form this cluster for all periods are UK, Ireland and Belgium; we label this cluster "*Anglo-Saxon*".
- *Cluster 3* (see Tabs. 6 and 9), characterised by a low level of expenditure for all variables considered (negative *T value*), except for old age and survivors pensions (positive T *value*). Greece falls into this cluster in the first 3 macro periods, Finland and Norway in the first macro period, while all the other countries remain in it for the whole period. We define cluster 3 "*Mixed*".
- *Cluster 4* (see Tabs. 6 and 10), characterised by a high expenditure level for family policies (*T value* 5.04), active labour market policies (*T value* 4.40), unemployment policies (*T value* 3.41), other policies (*T value* 5.51) and by a low expenditure level for survivors (*T value* -3.46). This cluster includes, for the whole period, Sweden, Denmark and the Netherlands, and for the last 3 periods also Norway and Finland. This cluster is labelled "*Northern European*"

Table 6. Clusters' Composition

Cluster	1	2	3	4
	Continental	*Anglo Saxon*	*Mixed*	*Northern European*
	Ger 80-85	Ire 86-91	Por 92-96	Fin 97-01
	Ger 86-91	Ire 80-85	Gre 80-85	Swe 97-01
	Aus 92-96	UK 80-85	Por 97-01	Nor 97-01
	Aus 86-91	Ire 92-96	USA 86-91	Ned 97-01
	Aus 97-01	Bel 97-01	Sui 92-96	Dk 97-01
	Aus 80-85	UK 86-91	Gre 86-91	Fin 86-91
	Fra 86-91	Ire 97-01	Spa 97-01	Ned 92-96
	Ger 97-01	Bel 86-91	USA 80-85	Fin 92-96
	Fra 92-96	Bel 92-96	USA 92-96	Dk 86-91
	Fra 97-01	Bel 80-85	Spa 86-91	Ned 97-01
	Gre 97-01	UK 97-01	Italy 80-85	Nor 97-01
	Ger 92-96	UK 92-96	Sui 97-01	Dk 80-85
	Fra 80-85		Spa 80-85	Ned 80-85
			Por 86-91	Ned 80-85
			USA 97-01	Swe 86-91
			Fin 80-85	Dk 92-96
			Nor 80-85	Swe 80-85
			Italy 86-91	Swe 92-96
			Gre 92-96	
			Sui 86-91	
			Italy 92-96	
			Por 80-85	
			Spa 92-96	
			Sui 80-85	
			Italy 97-01	
Inertia within cluster	0.80517	1.10379	3.33869	6.11057
Inertia between clusters		4.02125		

Table 7. Cluster 1 Characterisation

characteristic variables	cluster mean	Overall mean	Cluster standard deviation	Overall standard deviation	Test value
OLD	10.488	7.32	1.142	2.295	5.49
HEAL	6.314	5.479	1.002	1.011	3.29

Table 8. Cluster 2 Characterisation

characteristic variables	cluster mean	overall mean	Cluster standard deviation	Overall standard deviation	Test value
HOUS	0.942	0.391	0.466	0.383	4.33
SURV	1.511	0.999	0.896	0.687	2.83

Table 9. Cluster 3 Characterisation

characteristic variables	cluster mean	Overall mean	Cluster standard deviation	Overall standard deviation	Test value
OTH	0.266	0.444	0.283	0.325	-3.42
UNEMP	0.916	1.567	0.856	1.18	-3.44
INC	2.119	2.82	0.691	1.243	-3.52
HEAL	4.889	5.479	0.744	1.011	-3.64
HOUS	0.113	0.391	0.131	0.383	-4.09
ACTLAB	0.413	0.832	0.241	0.528	-4.68
FAM	0.858	1.985	0.449	1.118	-6.29

Table 10. Cluster 4 Characterisation

characteristic variables	cluster mean	overall mean	Cluster standard deviation	Overall standard deviation	Test value
INC	4.544	2.82	0.745	1.243	6.81
OTH	0.808	0.444	0.232	0.325	5.51
FAM	3.131	1.985	0.918	1.118	5.04
ACTLAB	1.303	0.832	0.477	0.528	4.4
UNEMP	2.386	1.567	1.351	1.18	3.41
SURV	0.515	0.999	0.301	0.687	-3.46

Fig 6. Factorial Plan with Countries' Movements

The limited intra cluster movement highlights the existence of 4 expenditure behaviour models that retain their characterisation for the whole period. These results induce us to reject the hypothesis of strong homogenisation of national social expenditure policies, which seem, instead, to follow their former peculiarities, according to a process of path dependency (Pierson, 2000)

Returning to the factorial plan, we can evaluate the movements of countries during the whole period considered with respect to all variables and to the two new latent variables, defined as an ageing population welfare measure (factor 2) and other welfare measures (factor 1), which depict the expenditure framework in the welfare domain. Looking at the factorial plan we observe that countries belonging to the Northern cluster, characterised by a high social protection level, in the last period (after 1992-96) all move towards the centre of the factorial plan (which means that they decrease their expenditures). Greece Portugal and Spain register an increasing expenditure during the whole period 1980-2000.

The behaviour of Northern countries may be influenced by their adhesion to the EMU and to the Maastricht Treaty fiscal constraints.

For Greece Portugal and Spain we could hypothesise that social, cultural and economic development in the early 80's occurring with the collapse of dictatorial regimes fostered the growth in social expenditures because these countries tried to approach the European welfare standard.

7. Conclusions

This paper aimed at investigating public welfare expenditures for a large group of countries, mostly European, aver a time span of twenty years (from 1980 to 2000). Our analysis underscored how public social expenditures increased until the mid 90's and decreased in the subsequent period, a result that seems consistent with the efficiency enhancing - "discipline effect" of globalisation.

Monovariate and convergence analyses, carried out by means of the traditional instruments of descriptive analysis and σ and β absolute convergence, reveal that for total welfare expenditures, and for some single items (mostly HEAL and OTH, but also UNEMP and FAM), the convergence hypothesis for the whole period 1980-2000 is supported.

Multivariate analysis, a further tool for studying the convergence dynamics, revealed that the harmonisation process in the public social expenditure domain was not so overwhelming as to support the emergence of a single European social expenditure model. The cluster analysis results showed that the countries generally retained their expenditure choices, as the majority of them fall into the same cluster over time despite considerable movements inside each cluster that translate into convergence displacements on the factorial plan.

These converging trends are more evident for some countries: on the one hand, as we have already stated, we registered in the last period considered (1997-2001) a retrenchment of expenditure levels in Northern European Countries

(Sweden, Denmark, Finland and the Netherlands), while on the other hand, an increase in social expenditures for the whole period was observed in Portugal, Greece and Spain.

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