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Impact of Global Economic Crisis on the European Welfare States

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Abstract:
The global economic crisis and the subsequent weaker growth are putting under pressure welfare states in the EU. This paper aims at discussing the effects of the crisis at the social level and at identifying whether the classic European welfare state models (Nordic, Continental, Anglo-Saxon and Mediterranean) are still valid in today's economy. An answer will be tried using the mathematical tool of principal components analysis. The results will be observed in graphs where the states taken into consideration respect the classical welfare models or they regroup themselves into new circumstances' adapted models. Even though the classical welfare models are generally still checked up with the analyzed indicators, our analysis reveals the need to theoretically redefining the European welfare state in the aftermath of the crisis and to have a unifying social policy concept. Besides calling into question the financial viability of the current social programmes, the crisis could be also a new opportunity to reconfigure and re-legitimize social policy.

Key Words: *European Welfare States, Global Economic Crisis, Principal Component Analysis*

JEL Classification*: H53, 050, D60*

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1. Introduction

Over the past two decades reform need arose in the European welfare states, deriving from demographic factors, employment crises and public debt (Thalassinos *et al.* 2010). The evolution of social security benefits since the 1990s reflects that in many EU countries the dismantling of the welfare state is already obvious. These tendencies are in part explained by the reforms of pension and healthcare systems, which account for 70-80 per cent of all welfare state expenditure.

The global economic and financial crisis and the subsequent weaker growth are putting under pressure the European welfare states. Cuts in services, as well as tax and contribution increases are further entrenching the process of recommodification which has characterized the reform of European welfare states for years (Busch, 2010).

Nonetheless, in the EU collective coverage of social risks is comprehensive[3] and welfare spending accounts for 16-30% of GDP; this is why the repercussions of the global financial crisis mark a particularly serious “stress test” for the European welfare states.

The unequal economic development and the catch-up processes (typical for the EU) determined also the social dumping. While in countries like Greece, Hungary and Portugal the economic catch-up process has gone along with an expansion of the welfare state, in other states (Estonia, Ireland, Latvia, Lithuania, Slovakia and Spain) the welfare state has been retrenched, in spite of the economic progress.

The new EU members from Central and Eastern Europe, with their stigmatization of socialism during the transformation from centrally planned economies to market economies, embraced the neo-liberalism typical for USA and Great Britain[4]. As people sought to escape socialist paternalism and enforced social entitlements such as unified corporate housing or corporate holidays, the general perception of the word “social” became increasingly negative (Večernik, 1993).

[3] Some of the key objectives of the initial Treaty of Rome were clearly social: maintaining a high employment rate, ensuring social security, increasing living standards and the quality of life, economic and social cohesion and solidarity among the member states (European Community, 2002).

[4] See Barysch (2005) and Schmögnerová (2007).

The global economic crisis had a dual effect for the social security systems: (1) due to higher unemployment, the expenditures of social insurance are increasing and (2) tax and contribution revenues are falling as a consequence of lower economic growth.

Taking into consideration that most European states have used large rescue packages in response to the crisis and to bale out the financial sector, larger deficits have emerged in state budgets and in the budgets of social insurance (Thalassinos and Politis 2011). Analyzing the state of the public budgets of EU countries in the wake of the global crisis, the European Commission (2009) indicated three measures:

1. the reduction of deficit and debt ratios;
2. an increase in employment rates and
3. social security reforms, especially of pension and healthcare systems.

These effects of the economic global crisis on the European welfare states were already investigated in a series of recent papers. For example, Diamond and Lodge (2013) present a comparative analysis of contemporary and future changes in welfare states and examine divergent trajectories of social development across Europe in the aftermath of the crisis. They draw lessons from quantitative public opinion surveys in three key EU member states (France, Denmark and UK) to inform debate on the future shape of welfare states after the global crisis.

Starting from the assumption that policy reactions to economic crises vary significantly across countries, Stake *et al.* (2012) make a comparative study on welfare state responses to three major economic crises (1970s oil shocks, 1990s recession, current financial crisis) in four OECD countries (Belgium, Netherlands, Sweden and Australia).

Another interesting contribution is that of Hemerijck and Vandenbroucke (2012), who revisit social policy as “productive factor” and link the euro crisis to the imperative of defining a social Europe. They assert that the current challenge is to make long-term social investments and medium-term fiscal consolidation mutually supportive and sustainable under improved financial and economic governance.

The purpose of this paper is to analyze and discuss the social protection expenditure in the crisis context and to identify whether the classic European welfare state models (Nordic, Continental, Anglo-Saxon and Mediterranean) are still valid in today's economy. An answer will be tried using the statistical tool of principal components analysis. The results will be observed in graphs where the states taken into consideration respect the classical welfare models or they regroup themselves into new circumstances' adapted models.

We have organized the remainder of the paper as follows: the next section discusses the level of social expenditure in EU countries in the period 2007-2010. Then we apply the principal components analysis (a variant of the factorial analysis method) for identifying to which classical social model the EU states currently belong. The last section provides the concluding remarks.

2. Analysis of Social Protection Expenditure in the Crisis Context

Because of the poorly performing economy, the EU states are spending more on social protection, with total expenditure having increased by 10% between 2007 and 2010, according to Eurostat.

Benefits for families, pensions and healthcare rose by about 10% in 2010, while unemployment benefits increased by 33% (the average rate of unemployment being 9.7% in 2010 and 2011 and arriving at 10,6% at present). The main sources of funding were represented by social contributions (56%) and general government contributions from taxes (40%).

However, there are great disparities between the EU member states. The countries that spent the most of GDP on social protection in 2010 were France (33,8%), Denmark (33.3%) and the Netherlands (32.1%), according to Table 1. The lowest social protection expenditure was recorded by Romania (17.6%) and Latvia (17.8%). These disparities are a consequence of differences in living standards, of various national social protection systems and of the demographic, economic, social and institutional structures specific to each EU country.

After eliminating cost differences between countries, the social protection expenditure per capita was nearly eight times higher in Luxembourg than in Bulgaria.

The biggest spending per capita after Luxembourg was registered in Denmark and the Netherlands, at more than 40% above the average of EU member states, followed by Austria, Ireland and Sweden at 30% above the average.

On average in the EU, old age and survivors benefits accounted for 37% of total social benefits in 2010, and represented the biggest part of social protection benefits in nearly all 27 European countries. The share of old age and survivors benefits in total was the highest in Poland and Italy (61%) and Malta (55%) and lowest in Denmark (38%0, Luxembourg (36%) and Ireland (23%).

Table 1 shows also clearly that in the crisis years the total social protection expenditure as per cent of GDP increased both at EU level from 26.1% to 29.4% and in each member state. The greatest increases were witnessed by Ireland (10.7%), Latvia (6.5%), Estonia (6%), Finland (5.2%), Spain (5%), Lithuania (4.7%), Greece (4.3%), Bulgaria (4%), and Romania (4%). This may reflect in part the crisis intensity, necessitating increased social assistance. For the case of Romania Thalassinos and Pociovalisteanu, 2007.

Table 1: Social Protection Expenditure 2010

Social protection expenditure, 2010

	Expenditure:				Benefits by function, in % of total social benefits:				
	in % of GDP			PPS per capita, EU27=100	Old age & survivors	Sickness/ healthcare & disability	Family & children	Unemploy-ment	Housing & social exclusion
	2007	2009	2010						
EU27	**26.1**	**29.6**	**29.4**	**100**	**45.0**	**37.4**	**8.0**	**6.0**	**3.6**
Belgium	26.9	30.4	29.9	121	39.6	35.7	7.7	13.3	3.6
Bulgaria	14.1	17.2	18.1	27	51.5	32.2	11.4	3.4	1.5
Czech Republic	18.0	20.3	20.1	55	47.2	40.1	6.8	4.2	1.7
Denmark	28.8	33.2	33.3	143	37.7	37.4	12.4	7.5	5.0
Germany	27.9	31.5	30.7	124	40.2	40.4	10.9	5.8	2.7
Estonia	12.1	19.3	18.1	39	44.2	37.7	12.7	4.2	1.1
Ireland	18.9	27.4	29.6	129	23.4	48.0	12.9	12.4	3.3
Greece	24.8	28.0	29.1	87	50.1	33.9	6.4	6.1	3.6
Spain	20.7	25.3	25.7	87	42.4	35.7	6.0	14.1	1.8
France	30.9	33.6	33.8	124	44.9	35.0	8.3	6.9	5.0
Italy	26.6	29.9	29.9	102	60.6	31.5	4.6	2.9	0.3
Cyprus	18.2	21.1	21.6	71	45.7	26.9	10.0	5.0	12.4
Latvia	11.3	16.9	17.8	31	53.5	28.4	8.5	7.4	2.2
Lithuania	14.4	21.2	19.1	37	44.0	35.8	11.9	4.4	3.9
Luxembourg	19.3	24.0	22.7	207	36.2	36.9	17.8	5.6	3.6
Hungary	22.7	23.5	23.1	51	46.4	33.7	13.0	4.0	2.9
Malta	18.0	20.0	19.8	56	54.9	33.6	6.3	2.8	2.5
Netherlands	28.3	31.6	32.1	145	39.2	43.4	4.1	5.2	8.1
Austria	27.8	30.6	30.4	130	49.6	32.8	10.4	5.7	1.5
Poland	18.1	19.2	18.9	40	60.9	31.6	4.2	2.2	1.1
Portugal	23.9	27.0	27.0	73	51.7	35.6	5.7	5.7	1.3
Romania	13.6	17.1	17.6	28	50.7	34.7	9.6	3.2	1.7
Slovenia	21.3	24.2	24.8	72	46.3	39.6	8.9	2.8	2.4
Slovakia	16.1	18.8	18.6	46	43.0	39.5	9.8	5.1	2.6
Finland	25.4	30.4	30.6	119	39.2	37.3	11.1	8.2	4.2
Sweden	29.2	32.0	30.4	129	42.1	39.1	10.4	4.5	3.9
United Kingdom	25.0	28.9	28.0	107	42.3	41.8	6.9	2.7	6.4

Notes: Data not available; PPS[5] = Purchasing Power Standard
Source: Eurostat News release 165/2012- 27 November 2012.

3. Applying principal components method for identifying how EU states frame in the classical social models

We present now the results obtained by applying the principal components analysis method to the data extracted from Eurostat. The data basis and the following graphs were built and analyzed using the STATA programme. These data refer to all 27 member states of the European Union (EU) and the collected indicators focus on aspects of the social area such as: total social expenditures and as per cent of GDP, private and public education, pensions, newborn expenditures, Gini coefficient, poverty risk. The level of GDP was also used for an image of the general economic situation. The complete list of these indicators is presented in Table 2.

Table 2: Representative social indicators

- GDP (total expenditures)
- Total social expenditures
- Total social assistance expenditures
- Total expenditures with education
- Private education expenditures
- Public education expenditures
- Social protection expenditures
- Pensions (public and private)
- Social expenditure as per cent of GDP
- Newborn total expenditures
- Old age total expenditures
- Gini coefficient
- Poverty risk
- People at risk of poverty or social exclusion (AROPE)

Our objective is to identify to which classical social model (described by Sapir, 2005) the EU states belong in the aftermath of the global economic crisis. The classical European social (sub) models are presented in Annex 1.

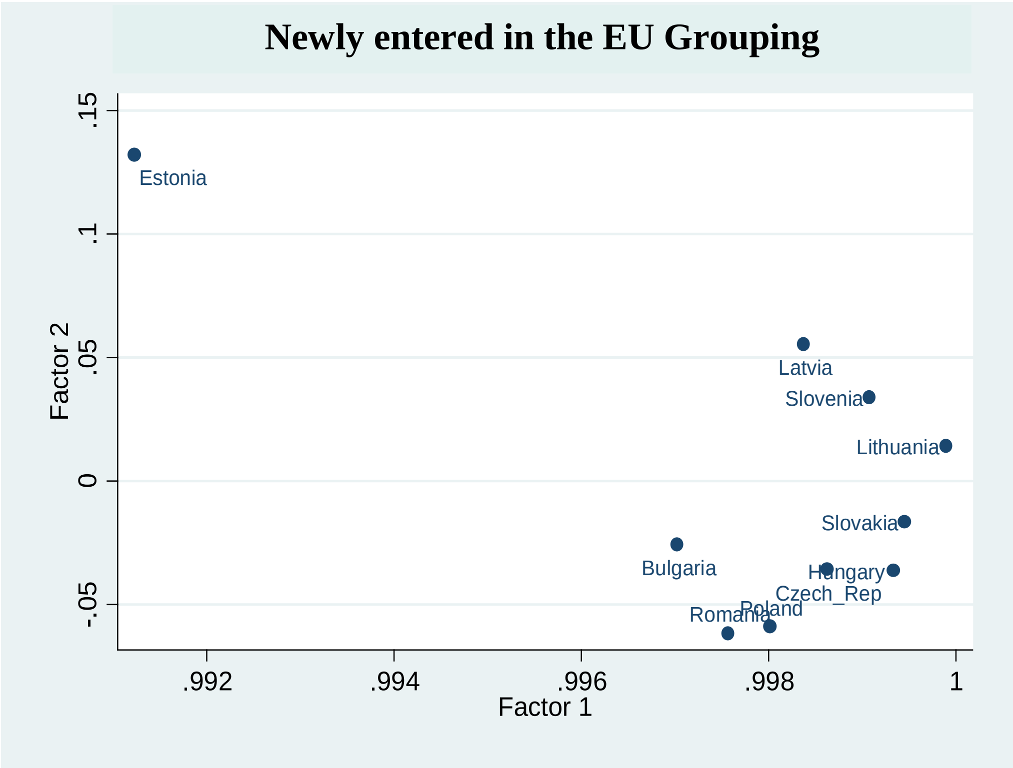
[5] PPS is an artificial reference currency unit that eliminates price level differences between countries. One PPS buys the same volume of goods and services in all countries. This unit allows meaningful volume comparisons of economic indicators across countries.

The different European social (sub) models are explained by the fact that the role of the state differs significantly among the old EU members. The contrast is even more categorical when comparing old with new EU members. The new EU member states may be classified into two groups: (1) Baltic states, Slovakia and the two South-Eastern countries (Bulgaria and Romania), which adopted a more neo-liberal (Anglo-Saxon) social model and (2) the other new member states (Czech Republic, Hungary, Poland, Slovenia), which resembles the continental model.

It is worth noting that no post-communist country has adopted the Nordic model. This is probably an indication that balance/harmony between equity and efficiency cannot be achieved at low general levels of prosperity (Neesham and Tache, 2010).

We start by selecting the new EU members (post-communist countries) in Figure 1. An inferior position can be observed for Romania and Bulgaria and a higher position for other states, especially the Baltic, but also for Slovenia (the first post-communist country entering the Eurozone). This last example (and that of Estonia as well) may indicate a relationship between accomplishing the Eurozone nominal convergence criteria and the improvement of social indicators. In the crisis context, it seems also that the Baltic move away from their initial Anglo-Saxon orientation.

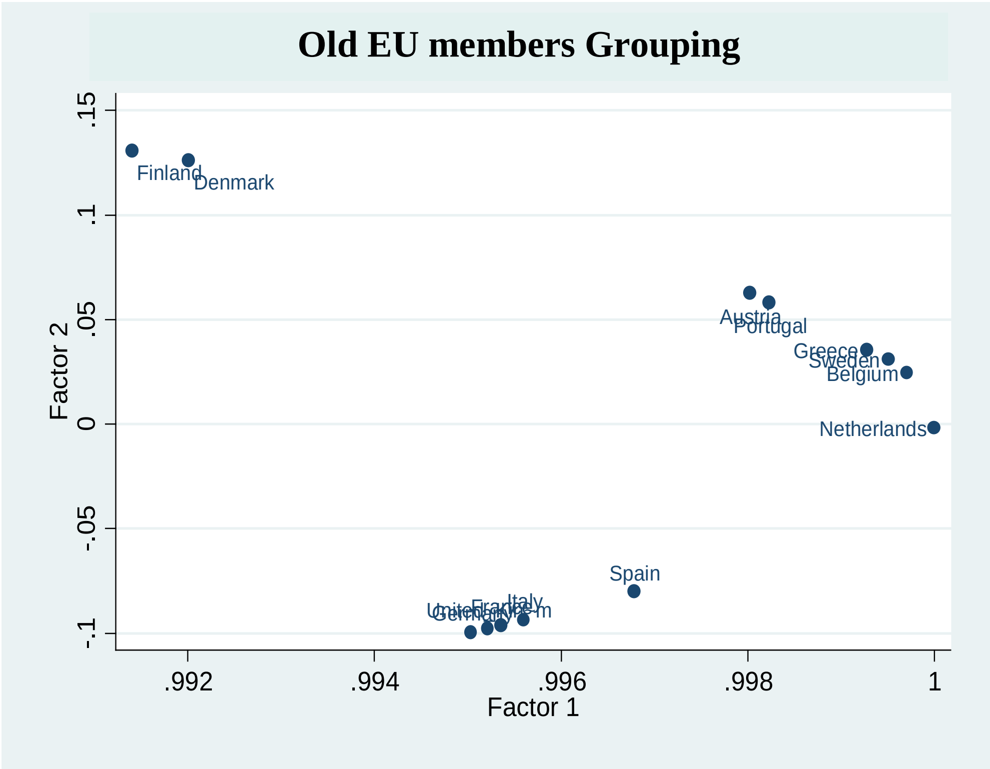
Figure 1: New EU members: Bulgaria, Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, Slovenia, Slovakia



__Note:__ LR test: independent vs. saturated: chi2(45) = 1004.60 Prob>chi2 = 0.0000

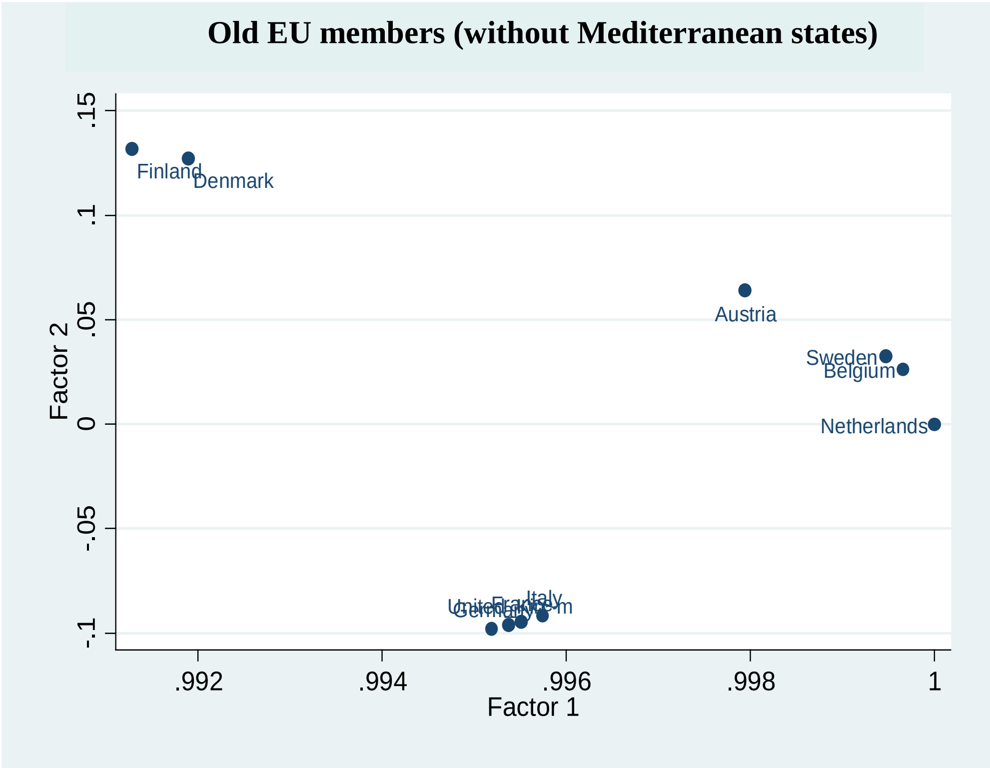
Taking into account that Luxembourg, Malta, Cyprus and Ireland are outliers (they stray significantly from the others) and do not look like any model, we selected in Figure 2 the rest of EU members. What is important here is that Finland and Denmark group together and this happens too for Sweden and Netherlands. It is also interesting Italy's and Spain's misleading position, where the weakness of government intervention makes them look like Anglo-Saxon countries. Ireland is a special case as well, because it traditionally belonged to the Anglo-Saxon social model.

Figure 2: Old EU members



The situation is somewhat similar in Figure 3, where, except Italy, the Mediterranean states were eliminated. One can notice how countries belonging to the continental zone, like Austria and Belgium, are close by countries traditionally situated in the category of the Nordic model, such as Sweden and Netherlands.

Figure 3: Old EU members (without Mediterranean states): Belgium, Denmark, Germany, France, Italy, Netherlands, Austria, Finland, United Kingdom, Sweden



Eliminating one by one all the states that look like outliers as compared to the rest, we obtain, on the axis of Figure 4, a reunion of all EU states that can be included in a model or group. Except Germany and Greece, the classical models are mostly verified on the basis of the known data.

In order to check the model validity, we finally realized a graph with the variables taken into consideration (see Figure 5).

Figure 4: EU countries (without outliers)

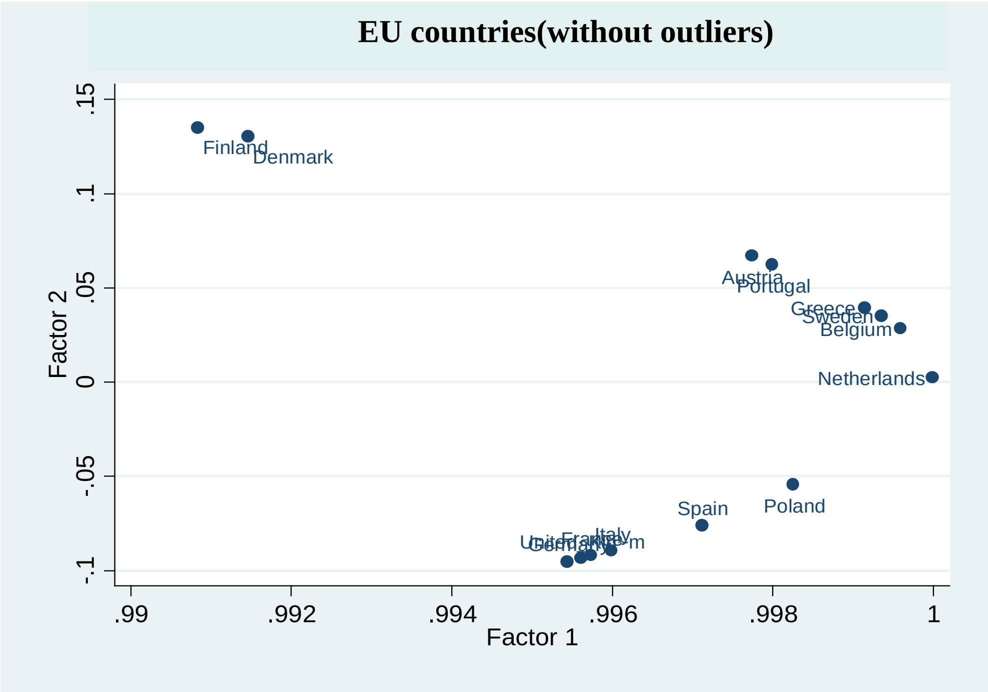
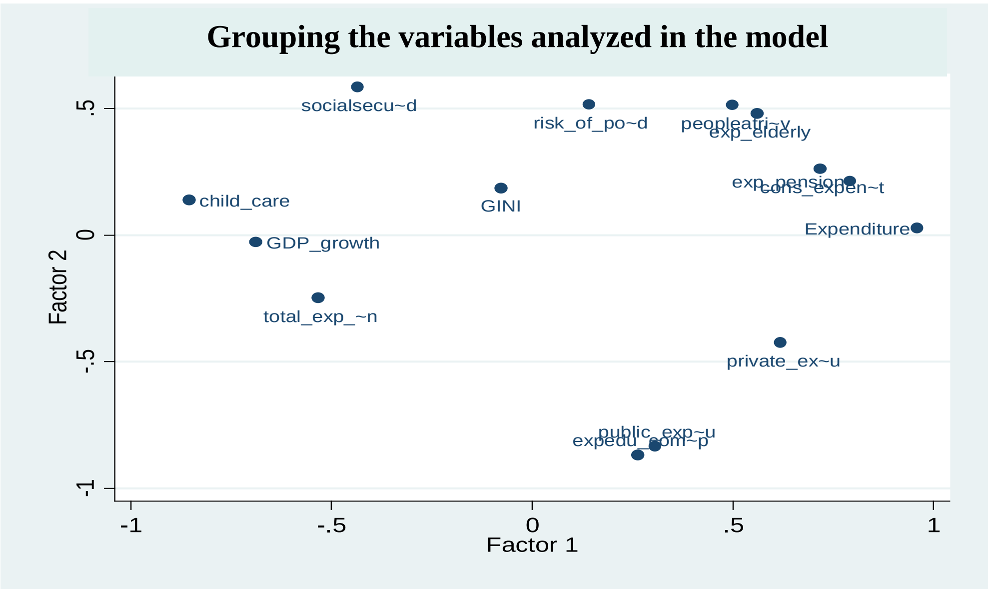


Figure 5: Grouping the variables analyzed in the model



4. Conclusion

Two main effects of the global economic and financial crisis can be identified for the social security systems: (1) due to higher unemployment, the expenditures of social insurance are increasing and (2) tax and contribution revenues are falling as a consequence of lower economic growth. They constitute a serious "stress test" for the European welfare states and for the EU principle of "social solidarity".

The new EU members that before the crisis featured characteristics of the Anglo-Saxon model, like the Baltic and the South-Eastern countries (Romania and Bulgaria) recorded the highest growths of the social protection expenditures in the interval 2007-2010.

Even if the global crisis and the resulting weaker economic growth put indeed under pressure the European welfare states, the classical welfare models are generally still checked up with the analyzed indicators. The 2010 economic and social situation corresponds to Sapir's classification. Sweden, Netherlands, Finland and Denmark respect the Scandinavian model, while countries like Belgium and Austria group together, remaining members of the continental (corporatist) area. UK keeps its typical position for a liberal (Anglo-Saxon) state. However, Ireland, always placed in the Anglo-Saxon model, enters now in the outliers' category and registered in the period 2007-2010 a huge increase of the total social protection expenditure as per cent of GDP (10.7%, the highest in the EU).

The graphs also illustrate the difficulties confronted by the countries belonging to the Mediterranean zone and some of the new EU entrants (Romania and Bulgaria). Italy, Spain and Portugal remain in an inferior area of the graph, with a weak social performance, together with the countries of the 2007 enlargement wave.

Another finding is the rapprochement between the continental model countries and the Nordic (Scandinavian) ones. Actually, Sweden seems indeed to direct towards the continental model. Greece and Portugal, countries belonging traditionally to the Mediterranean model, are also much closed to the continental features of the welfare state. Poland as well, from the group of the new entrants (the other new members appearing as "outliers") can be placed in the continental model.

The grouping of the analyzed variables confirms the model validity and authenticity of results. Variables as GDP growth and Gini coefficient appear somehow detached from the group of the other social indicators, like education, health or pensions expenditures, which are framed into the same category.

It is obvious that the global recession calls into question the financial viability of the current social programmes and that it will roll back a series of welfare state measures, but it could be also a new opportunity to reconfigure and re-legitimize social policy, emphasizing the necessity o a unifying social policy concept. The need appears to theoretically redefining the European welfare state in the aftermath of the crisis. In our opinion, the continental corporatist model seems the best fitted for the present challenges of the welfare European states.

References

Barysch, K. (2005), "East versus West? The European Economic and Social model after Enlargement", *Centre for European Reform*, London.

Busch, K. (2010), "World Economic Crisis and the Welfare State, International Policy Analysis" *Friedrich Ebert* Stiftung, February.

Commission of the European Communities (2009), "Long-term sustainability of public finances for a recovering economy. Communication from the Commission to the European Parliament and the Council".

Diamond, P. and Lodge, G. (2013), "European Welfare States after the Crisis" London, United Kingdom.

European Community (2002), "Official Journal of the European Communities", 24 December, Tile XI: 92-97.

Hemerijck, A.C. and Vandenbroucke, F. (2012), "Social investment and the Euro Crisis: The Necessity of a Unifying Social Policy Concept" *Intereconomics*, 1-7, ZBW – Leibniz Information Centre for Economics.

Neesham, C. and Tache, I. (2010), "Is There an Eastern European Social Model?", *International Journal of Social Economics*, Vol. 37, Issue 5, Emerald Group Publishing Limited.

Sapir, A. (2005), "Globalization and the reform of European social models", *Bruegel Policy Brief.*

Schmögnerová, B. (2007), "Impact of EU enlargement on the European social model, Policy Network – New Ideas for Progressive Politics".

Starke, P., Kaasch, A. and Van Hooren, F. (2012), "Comparing social policy responses to global economic crises: Constrained partisanship in mature welfare states", *paper presented at ESPA net annual conference*, Edinburgh, 6-8 September 2012.

Thalassinos, I.E., Deceanu, L., Pintea, M. and Zampeta, V. (2010), "New Dimensions of Country Risk in the Context of the Current Crisis: A Case Study for Romania and Greece," *European Research Studies Journal*, vol. XIII, (3), 225-236.

Thalassinos, I.E. and Pociovalisteanu, D.M. (2007), "A Time Series Model for the Romanian Stock Market", European Research Studies Journal, Vol. X, (3-4), pages 57-72.

Thalassinos, I.E. and Politis, E.D. (2011), "International Stock Markets: A Co-integration Analysis," *European Research Studies Journal*, Vol. XIV, (4), pages 113-130.

Večernik, J. (1993), "Escaping from socialist paternalism: social policy reform in the Czech Republic", *Czech Sociological Review*, Vol. I., 149-172.

Annex 1: The European social submodels[6]

Four classical social submodels can be identified in the EU, covering four different geographical areas: The Nordic or Scandinavian social-democratic model, the Anglo-Saxon liberal model, the continental (corporatist) model and the Mefiterranean model.

- Nordic countries (Denmark, Finland and Sweden, plus the Netherlands) have the highest levels of social protection expenditures and universal welfare provision. The emphasis on social redistribution is illustrated by the share of taxes in GDP, which is above 45 per cent. There is extensive fiscal intervention in labour markets, basede on a variety of "active" policy instruments. Strong labour unions ensure highly compressed wage structures. The Nordic model features a purely Danish invention, flexicurity, whicjh is based on the belief that flexibility and security are not contradictory and can actually be mutually supportive. Flexicurity consists of a flexible labour matket with fewer restrictions on both hiring and firing, a high level of social security and an active labour market policy.
- The continental corporatist model (France, Germany, Austria, Belgium and Luxembourg) places a strong accent on the role of labour law and the collective bargaining. These countr insurance-based, non-employment benefits and old-age pensions. Although their membership is declining, unions remanin strong as

[6] This Annex is based on Neesham and Tache (2010).

regulations extend the coverage of collective bargaining to non-unionised workers.

- Anglo-Saxon countries (Ireland and the UK) are characterized by predominant role of markets, minimal role of the state and low degree of regulation. They feature relatively large social assistance of the last resort. Cash transfers are primarily oriented to people in working age. This model displays a mixture a weak unions, comparatively wide and increasing wage dispersion and relatively high incidence of low-piad employment.
- The Mediterranen model is primarily used in Italy, Greece, Portugal and Spain, and concentrates the social spending on old-age pensions. Its social welfare system typically draws on employment protection and early retirement provisions to exempt segments of the working age population from participation in the labour market. This system is family-centred and retains some characteristics of agrarian, paternalistic societies.