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ABSTRACT

Efficiency and Effectiveness of Social Spending*

In this qualitative sociological and quantitative economic policy paper, we start out from the assumption of a very recent European Commission Background paper on the "*Efficiency and effectiveness of social spending*", which says the effectiveness of social spending can be defined by the degree to which the realized allocation approaches the socially desired outcome. The conclusions listed in the Commission paper are found far reaching and not supported by the empirical data. We perform such an analysis, starting from advances in recent literature. A more encompassing sociological perspective on the issue and factor analytical calculations is presented, which supports our general argument about the efficiency of the Scandinavian model. The social quality approach provides an alternative perspective on welfare system analysis, focusing on public policies rather than social policies. The empirical evidence, suggests that in terms of the efficiency of the European social model, the geography of comparative performance include: the direct action against social exclusion, health and family social expenditures, the neo-liberal approach, and the unemployment benefit centred approach. Applying rigorous comparative social science methodology, we also arrive at the conclusion that in terms of the initial ECOFIN definition of efficiency, the data presented in this article suggest that apart from Finland and the Netherlands, three new EU-27 member countries, especially the Czech Republic and Slovenia, provide interesting answers to the question about the efficiency of state expenditures in reducing poverty rates.

JEL Classification: C43, C21, F15, R11, F2, F5

Keywords: social spending, European Commission, index numbers and aggregation, cross-sectional models, spatial models, economic integration, regional economic activity, international factor movements, international political economy

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* Towards a theoretical and empirical critique of the European Commission's paper *"Efficiency and Effectiveness of Social Spending. Achievements and challenges. Background note for the informal ECOFIN of 4-5 April 2008".*

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EXECUTIVE SUMMARY

In this qualitative sociological and quantitative economic policy paper, we start out from the assumption of a very recent European Commission (ECOFIN, 2007) Background paper on the "*Efficiency and effectiveness of social spending*", which says the effectiveness of social spending can be defined by the degree to which the realized allocation approaches the socially desired outcome. For the EU-Commission, the issue at stake is whether it is more important to foster equal opportunities for all people by guaranteeing access and solidarity or to guarantee equal outcomes for its citizens, through income redistribution systems. However much the present authors emphasize the great theoretical and empirical value of the efficiency definition, the far-reaching conclusions listed in the Commission paper are not supported by the empirical data, presented in the paper, let alone, by a solid econometric or politometric analysis in the spirit of the above definition.

We try to perform such an analysis, starting from advances in recent literature, most convincingly proposed by Aiginger (2008). We also present a more encompassing sociological perspective on the issue and factor analytical calculations, which support our general argument about the "efficiency" of the Scandinavian model.

A narrow micro-approach neglects a wider and more elaborated understanding of the social as outcome of the interaction and dialectic between people (constituted as actors) and their constructed and natural environment which allows to define social quality as the extent to which people are able to participate in the socio-economic, cultural, juridical and political life of their communities under conditions which enhance their well-being and individual potentials for contributing to societal development as well. A macro-approach, which is inspired by the rigorous indicator work of the United Nations Development Programme, allows opening the view on a developmental perspective that is not caught in the national enhancement orientation but seeks for developing a sustainable strategy that takes global issues into account. This means for welfare regime analysis that we have to overcome the functionalist determinism and equally the limited understanding of the relationship between economic and social policy as delivery, cost and supply relationship.

Rather, properly understood as matter of global responsibility and systematic interrelationship – the economic processes being social relations and social processes being economic relations – the "Social Quality Approach" provides an alternative perspective on welfare system analysis, focusing on public policies rather than social policies. The challenge of this new approach is to build such a globally oriented conceptual framework, with which to analyse the mechanisms and their outcomes by applying its architecture, namely: (i) by defining the concept of 'the social', (ii) the recognition of the herewith ontologically related conditional factors, constitutional factors and normative factors, (iii) exploring the interaction of these three factors, (iv) elaborating the measurement instruments of these factors in an epistemological acceptable way. These factors and its domains are captured in the following table (see Table 1).

Table 1: The real efficiency of social expenditures in Europe

	Social expenditure as a percentage of GDP	Standard Eurostat data on poverty after social transfers are better than expected (in % points)	Predicted value (linear regression: social expenditures -> improvement of the social situation) [Eurostat data on poverty after social transfers]	Residual (efficiency of social expenditures) [Eurostat data on poverty after social transfers]
Czech Republic	19,3	4,73	-1,17	5,90
Slovak Republic	17,3	2,13	-1,80	3,93
Slovenia	23,7	3,33	0,22	3,11
Netherlands	28,3	4,43	1,68	2,75
Finland	26,6	3,83	1,14	2,69
Malta	18,4	0,73	-1,45	2,18
Denmark	30,9	4,53	2,50	2,03
Hungary	20,7	1,13	-0,72	1,86
Sweden	32,7	4,83	3,07	1,76
Luxembourg	22,3	1,33	-0,22	1,55
Ireland	18,2	0,03	-1,52	1,55
Germany	29,6	2,93	2,09	0,84
Estonia	13,1	-2,37	-3,13	0,76
Austria	29.0	2,63	1,90	0,73
Cyprus	17,8	-1,27	-1,64	0,37
France	31,3	2,63	2,63	0,00
Lithuania	13,3	-3,77	-3,07	-0,70
Belgium	29,3	1,23	2,00	-0,76
Romania	15,1	-3,67	-2,50	-1,17
Poland	20,1	-2,17	-0,91	-1,25
EU25	27,3	-0,07	1,36	-1,43
EA13	27,8	-0,37	1,52	-1,89
Portugal	24,7	-2,37	0,54	-2,91
United Kingdom	26,3	-1,87	1,05	-2,92
Latvia	12,9	-6,47	-3,19	-3,28
Spain	20,6	-4,67	-0,76	-3,91
Italy	26,0	-4,67	0,95	-5,62
Greece	23,6	-5,97	0,19	-6,16

Our own calculations from ECFIN/E3(2007)/REP/50604 and the standard Eurostat data: "*Structural Lisbon Indicators*". The fourteen Lisbon indicators can be downloaded free of charge from the Eurostat website at: http://epp.eurostat.ec.europa.eu/portal/page?_pageid=1133,47800773,1133_47802558&_dad=portal&_schema=PORTAL. This site also informs about the "short list" of the indicators, on methodology, quality profiles etc. The computer software for the calculation of these results was Microsoft EXCEL 2000 and 2003. For the rest of the notes see also: Table 1 of this work

The empirical politometric evidence, surveyed in this article, and which supports a "social quality approach", suggests that in terms of the efficiency of the European social model there is the following geography of comparative European performance in place, which again underlines the importance of the Aiginger analysis about the importance of the "model Scandinavia":

- The direct action against social exclusion, as best evidenced by the cases of Denmark and Ireland, combines very high expenditures on housing and for the fight against social exclusion, and a very high government contribution towards the financing of the social policy model. The model has a very low share of employer's contribution in the financing of the model, and pension expenditures are a smaller part of total benefits. The trade-off with the effectiveness of poverty reduction is significant.
- Health and family social expenditures, typically present in Estonia and Ireland, combine very high expenditures on family and children, and on health, sickness and disability. Pension expenditures are a smaller part of total benefits. The trade-off with the effectiveness of poverty reduction is not significant, but positive.
- The neo-liberal approach, which means in effect that contributors, not the governments pay for the social system, is well present today in the Netherlands and in Romania. The model combines very high contributions by the insured persons and very low contributions by the state. The trade-off with the effectiveness of poverty reduction is not significant, but positive.
- There is a fourth model being practiced in Europe – it is the unemployment benefit centred approach. Belgium and Spain are the model countries. The model is based on a very high share of unemployment benefits per total benefits. The trade-off with the effectiveness of poverty reduction is significant at the 10% error level and positive.

Applying rigorous state of the art cross-national comparative social science methodology, we also arrive at the conclusion that in terms of the initial ECOFIN definition of efficiency, the data presented in this article suggest that apart from Finland and the Netherlands, three new EU-27 member countries, especially the Czech Republic and Slovenia, provide interesting answers to the old and troubling question about the "bang" and the "buck", i.e. the efficiency of state expenditures in reducing poverty rates. Italy, Spain and Greece in each case are among the worst performing countries in Europe.

The mediocre performance of the often hailed best practice model of the United Kingdom on all accounts of this study should be also taken into account.

1. INTRODUCTION

In this short sociological and economic policy paper, we start out from the assumption of the Commission Background paper (ECOFIN, 2007), which states on page 26:

"Regarding redistribution, effectiveness of social spending can be defined by the degree to which the realized allocation approaches the socially desired outcome. For example, a social objective could be to reduce the risk of poverty (defined by some income threshold). If the market allocation without government intervention leaves 30% of the population at risk of poverty, effectiveness is measured by the extent to which government intervention reduces the poverty risk. Efficiency can be defined by the amount of foregone resources by moving towards the desired allocation. Social spending is more efficient if less resources are used for a given change, or if, for a given level of foregone resources, the economy moves closer to the desired allocation."

We are well aware of the fact that the issues at stake have many repercussions for overall European policy performance, especially the so-called Lisbon performance. For Aiginger (2008), the European model is no barrier to competitiveness, if it is reformed in the direction of fostering change and growth, improving incentives and qualifications. This is demonstrated in Aiginger, 2008 specifically by the Scandinavian countries, which now combine - after several crises, devaluations, unsuccessful fiscal consolidation - rapid growth, full employment, with a comprehensive welfare system and a high priority for ecological concerns and fairness.

The successful countries had, Aiginger maintains, to undergo substantial changes to be able to adapt their specific version of the European Socio-economic Model to the challenges of globalization.

For Aiginger, the strategy rested on five pillars:

1. Managed and balanced flexibility,
2. Making work pay and training an obligation,
3. Fiscal prudence plus quality of government,
4. Fostering investment into the future, and
5. Following a consistent long run strategy,

embedded in trust and strong institutions. As far as institutions were concerned, the Scandinavian countries always had for Aiginger more inclusive institutions, and less insider-outsider problems (see also Lindbeck, 2006).

The Scandinavia countries managed according to Aiginger to maintain and to exploit this property: the coverage of collective agreements is increasing, trade union membership is stable, both in contrast to continental economies. The inclusiveness of institutions and the trust in society enabled these countries to deregulate contracts, to make use of part-time work and fixed-term contracts without increasing poverty and exclusion. Four-partite decision making seems to be more open for radical change, than two-partite policy making, since at least two partners (government and experts) will represent general interests. And the strong position of firm representatives and of Trade Unions enables the countries to cope with the burden of change and with the reintegration of losers (than in case of government or experts led change). The burden of change is acceptable if it are derived from a positive vision and if the burden is distributed in a fair way. Complex reforms – like increasing flexibility and security at the same time – are feasible in trusting societies. Strong and inclusive institutions –

including strong Trade Unions and strong employers' organisation, will not over exaggerate for specific interests, thus preventing Olson's petrification hypothesis (Olson, 1986). In the ideal case they will help to foster externalities (e.g. innovation, education, lifelong leaning) thus making the economies more competitive, while reducing unemployment, uncertainties and ecological problems.

For Aiginger and associates (2007), the central question is the characterization of a number of welfare state models in the tradition of Esping-Andersen (1990, 1996 and 1999/2000), analysing the economic and social performance of these different welfare regimes on an encompassing empirical basis both in the long run and with respect to their adaptability to the challenges of the last decades. While for Aiginger and associates the differences with regard to growth dynamics had been very small in the decades after World War II (1960–1990), growth rates as well as the employment and social policy records have diverged over the past 15 years. The best performances were found for the extremes: the Scandinavian model and the liberal Anglo-Saxon model, while the continental model produced low growth and increasing unemployment. The reforms primarily in the Scandinavian countries allow them to delineate elements of a "New Welfare State Architecture" which on the one hand upholds important characteristics of a European social model, but on the other hand allows welfare states to be competitive in the globalising economy. Such a European socio-economic model could redirect incentives in such a way that the welfare state is able to shift from a burden (increasing costs and lowering flexibility) to a productive force.

Tausch, Heshmati and Balajan (2007) think that only a Schumpeterian vision of capitalism as a process of "creative destruction"[3] - or rather - "destructive creation" can explain the contradictions, which they empirically reveal in this analysis, and which for them beset the "Lisbon process" from the very beginning. Their factor analysis shows that a majority of the fourteen “kernel Lisbon indicators” go indeed hand in hand with high comparative price levels; high freight transport; high greenhouse gas emissions; low business investment rates; and low youth educational attainment rates. The authors conclude that in reality we are facing four underlying and contradictory processes including a Lisbon productivity factor; high eco-social exclusion; the employment performance; and the neo-liberal European model.

HM Treasury *et al.* (2008) argue that the knowledge-based economy favours labour market entrants and workers with higher skills, while technological and structural change may require new and different types of skills, which will need to be updated throughout the lifecycle. Human capital formation is therefore crucial – to promote opportunity and employability of workers, and to increase the innovative capacity of companies and economies (see Tausch, Bischof and Mueller, 2007). Demographic change makes a culture of lifelong learning even more important. In the opinion of the policy paper of the three Finance Ministries (Germany, Sweden, United Kingdom), education alone, however, is not enough. It has to be complemented, the three Finance Ministries argue, by policies to remove barriers to labour market participation, and set in the context of well-functioning labour, product and capital markets and macroeconomic stability that together allow for high levels of job creation and international competitiveness.

[3] Schumpeter (1934, 1942 and 1950).

The three Finance Ministries identify some common features of what they call successful policies and draw on examples of what they call modern policy design and development from across Europe, so “we can begin to learn together and from each other to equip our citizens with the necessary skills to make the most of the opportunities in the global age. In this way security is provided as people can manage and take advantage of change, without protecting specific jobs”[4]. The “best practice” models, referred to in the study, include the national childcare investment programme 2006–2010 in the Irish Republic, the universal childcare system in Sweden, the Portuguese policies to reduce early school dropouts, Finland’s system of high quality basic education, the Dutch system of matching vocational training with market demand, the Danish apprenticeship system, the new UK diploma system, higher education tuition fees in the UK and in the Netherlands, and the labour market reforms in Germany from 2002 onwards.

Since the sociological reasoning behind the classification of social welfare regimes is often unclear, we compare here the Commission approach with a more general sociological perspective.

Rest of this study is organized as follows. In Section 2 the main findings by the European Commission is presented. Section 3 contains discussions including: sociological perspective on welfare regimes, and an answer without real questions; the alternatives of welfare capitalism or welfare systems; social policy or policy for developing and maintaining the social; institutionalist functionalism versus social development; and extended rational choice and methodological individualism. Section 4 is a critique on computation methodology employed by the European Commission followed by a comparison of our own methodology and that of the European Commission in Section 5. The issue of reliability of estimates of the efficiency of social policy is discussed in Section 6 and those of the correlates of the efficiency of social policy expenditure in Section 7. The mathematical model of multivariate analysis, its usefulness, strengths and limitation and empirical results are discussed in Section 8 and 9, respectively. The final Section concludes.

2. THE MAIN FINDINGS BY THE COMMISSION

The European Commission says in their paper (page 6 ff) that:

1. The issue at stake is whether it is more important to foster equal opportunities for all people (to start well in life and make the most of the chances offered), by guaranteeing access and solidarity (as stressed by the recent Commission Communication "Opportunities and access: a new social vision for 21st century Europe"), or to guarantee equal outcomes for its citizens, through income redistribution systems.
2. Redirect rather than increase public expenditure. Increased spending in itself will not necessarily improve the quality of social services.
3. When reforming social schemes, a comprehensive approach is needed. Revisions in the pension systems and in the unemployment benefit schemes should be

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[4] http://www.hm-treasury.gov.uk/documents/international_issues/european_economic_reform/social_bridges_ii.cfm

implemented in parallel, through the tightening of eligibility criteria and the revision of the incentive structure for the access to social benefits such as disability pensions and sickness benefits. Access should be limited to those who genuinely qualify, in order to avoid that they become alternative pathways to early retirement or to unemployment benefits.

4. Encouraging people to work longer and be more active in order to cope with the social, economic, fiscal and other challenges posed by ageing populations.
5. "Making work pay" through appropriate incentives so that tax/benefit systems do not hinder labour market dynamics and actually help to facilitate structural change.
6. Pursuing further the ongoing efforts to improve cost-effectiveness and long term financial sustainability of health care while ensuring access to adequate healthcare and improving health outcomes
7. Evaluate and screen regularly the efficiency of social policies, with a strong emphasis on value for money.

3. WELFARE REGIMES

3.1 Welfare Regimes – Developing a Sociological Perspective

It is now appropriate to present a more encompassing sociological perspective on “welfare regimes” with reference to institutions and the Social. Ever since the publication of Esping-Andersen’s “Three Worlds of Welfare Capitalism” (1990), social scientists have categorized advanced Western welfare states at least in three variants: either as a Nordic social-democratic system, or as a conservative system on the European continent, or as a liberal welfare state system in the Anglo-Saxon countries.

With Jayasuriya (2008), these three models of the welfare state are briefly described below:

1. The Liberal/Free Market regimes are characterised by selectivist residual welfare which is a targeted means tested welfare for the poor and places limits on the realm of social rights The latter may include features such as welfare recipients having relative equality, market differentiated welfare among the majority, means tested poor relief, and private pensions and private expenditure on health. This is typical of the USA welfare system which relies on a high degree of private market supplementation for those not entitled to benefits, and increasingly evident in the contemporary Australian welfare system.
2. The Conservative/Corporatist or Social Market type of welfare state upholds status differences by linking welfare benefits (‘social rights’) to compulsory membership in occupationally differentiated welfare schemes, e.g., of social insurance. Accordingly, welfare outcomes are limited by features such as income maintenance benefits, other corporatist contributions and earning related characteristics. This type of welfare regime based on employee rights and benefit adequacy tends to be characteristic of the European Welfare State systems such as Germany (again under threat from neo-liberal social and economic theorists).
3. The Social Democratic/Scandinavian model of the welfare state is organised around universal benefits or citizens with social rights having equal benefits. Importantly,

these systems with a high degree of benefit equality do not regard equality in terms of minimal needs and what is more, avoids the dualism of state and markets. This is characteristic of Scandinavian social democratic states (e.g., Sweden), and also the UK to some extent, where redistribution and social solidarity were major objectives at least before the dismantling of the welfare state by Thatcher.

Scheme 1 shows the resultant three models of welfare states ('welfare state' regimes') based on each type of index, namely the de-commodification and stratification indices. The industrialized countries are grouped into three groups by their index level and models of the welfare state.

Scheme 1: Esping-Anderson's Three Worlds of Welfare Capitalism

Index of De-commodification			Index of Stratification		
Low	Medium	High	Liberal	Conservative	Socialist
Australia	Italy	Austria	Australia	Austria	Denmark
USA	Japan	Belgium	Canada	Belgium	Finland
New Zealand	France	Netherlands	Japan	France	Netherlands
Ireland	Finland	Norway	USA	Italy	Sweden
UK	Switzerland	Sweden			

Esping Anderson (1990): Table 2.21

3.2 Welfare Regimes – An Answer without Real Questions

As we already said briefly, it seems at least nowadays impossible to enter a debate on issues as they are brought forward here not just without making reference to this mentioned typology of the different welfare regimes (apart from the mentioned work of Esping-Andersen 1990; see as well e.g. Ferrara, Maurizio and Rhodes, 2000). And indeed, his proposed three "models" are at first sight plausible, easily fitting into the debate of policy challenges of the time. However, it is exactly this, what characterises the weakness of the approach. Esping-Andersen's work, from a sociological perspective, fundamentally lacks important analytical dimensions and is – at most – an a posteriori approach to future policy making. The lack of analytical thinking concerns especially the following three dimensions:

- The definition of social policy is structurally limited on the institutional system, not only leaving the development of alternative pathways and instruments out of sight, but moreover fundamentally neglecting the provision of a clear understanding of what the social actually is, i.e. what the goal and aim of any social policy is,
- The fostering of the institutionalist perspective of social policy, and finally
- The promotion of a one-sided methodology of an extended methodological individualism.

3.3 Welfare Capitalism or Welfare Systems?

This section discusses the welfare capitalism versus welfare systems with reference to the lack of an economic framework. The most common reference is made to welfare regimes, commonly defined:

as a particular constellation of social, political and economic arrangements which tend to nurture a particular welfare system, which in turn supports a particular pattern of stratification, and thus feeds back into its own stability (Taylor-Gooby: 1996: 199 ff.; here: 200)

or in the words of Gøsta Esping-Andersen

A welfare regime can be defined as the combined, interdependent way in which welfare is produced and allocated between state, market, and family (Esping-Andersen, 1999/2000: 34 f.).

Esping-Andersen's work should be submitted to a further critique here. First, though with the publication of his work the issue of welfare typologies gained momentum in the academic and public-political debate, it seems important to mention the preceding theoretical efforts, which in many ways seem to be far more consistent than Esping-Andersen's approach. As far as social science is concerned, there had been earlier works being hugely relevant on the issues under debate here. Though one could go much further – for instance by including even the work of William Beveridge himself – there are two major forerunners, each with a very specific stance which is lost in the current debates. First, it is useful to look at the work undertaken by Harold Wilenski and Charles Lebaux, who stated:

Two conceptions of social welfare seem to be dominant in the United States today: the residual and the institutional. The first holds that social welfare institutions should come into play only when the normal structures of supply, the family and the market, break down. The second, in contrast, sees welfare services as normal, 'first line' functions of modern industrial society … In our view, neither ideology exists in a vacuum; each is a reflection of the broader cultural and social conditions ... and with further industrialization the second is likely to prevail (Wilensky and Lebeaux 1976: 138, 140)[5].

Here, the conceptualisation is based on a simplified understanding of modernisation, namely employing three theses.

- The authors start from the assumption that overall societal development is coined by a shift from the residual to the institutional model, and
- Following the US American understanding of the 1950s, such modernisation is understood in simple terms as increasing industrialisation, consequently

[5] Of course, reading this one can interpret as well the basic document of catholic social thinking and its emphasis of subsidiarity (see Rerum Novarum Encyclical of Pope Leo XIII on Capital and Labor [1891] http://www.vatican.va/holy_father/leo_xiii/encyclicals/documents/hf_l-xiii_enc_15051891_rerum-novarum_en.html – 06/07/06; 9.10 a.m.; Quadragesimo Anno. Encyclical of Pope Pius XI on Reconstruction of the Social Order to our Venerable Brethren, the Patriarchs, Primates, Archbishops, Bishops, and Other Ordinaries in Peace and Communion with the Apostolic See, and Likewise to All the Faithful of the Catholic World [1931] – http://www.vatican.va/holy_father/pius_xi/encyclicals/documents/hf_p-xi_enc_19310515_quadragesimo-anno_en.html – 0607/ ; 9.09 a.m.) as a matter of welfare regime challenge and proposition.

- The development of the institutional model is measured as increase of the spending of the social expenditure, relative to the GDP.

However, the approach is remarkable, as it develops a typology not from an international perspective, but from an analysis within the national framework. This entails a fundamental difference as well if compared with Esping-Andersen. What is decisively distinct is the taken perspective: whereas the latter is strictly institutionalist, Wilensky and Lebaux (1976) aim on detecting a wider understanding not only of the institutionalist system but as well of the actual setting of objectives. Sure, this is geared to discussing the value of the 'American way of social policy' – and the need of reconsidering its structure while facing the challenge of early globalisation. Although one can well debate the presented way, the approach discusses at least to some extent as well the actual meaning, the aims and objectives of social policy – an endeavour Esping-Andersen falls entirely short of doing.

Later, Richard Titmuss presented from a British perspective, however now taking an international comparative stance three models, namely:

- The residual welfare model of social policy,
- The industrial achievement-performance model of social policy and
- The institutional-redistributive model of social welfare (see Titmuss1974: 30 f.).

On the one hand, economic approaches often fall in many cases short by reducing economic matters on technical relationships of individualised actors in economic transaction processes – and from there they would need to be translated into their core of being fundamentally socially determined relationships. In this regard the theory of regulation is much more suitable to provide a suitable framework for welfare systems analysis. However, and this is the other side: any regulationist approach (for a discussion see for instance Boyer and Saillard, 1995; Jessop and Sum, 2006) aims on an integrated systems analysis (see for further elaboration: Herrmann Peter: forthcoming). Although this means to use this approach as well as a tool of a somewhat functionalist analysis of an existing system, it goes far beyond the welfare regime analysis of the Esping-Andersen style as the latter takes the stance of a genuine link between welfare and capitalism for eternally unquestionable. In other words, the current debate of welfare regimes, as it is largely inspired by the work of Esping-Andersen, is fundamentally fading out what welfare systems are actually about. Rather asking such a question, they are looking for optimising the way of administering the deficits.

Of course, this does not come as a surprise – and with this we arrive at the second aspect of the questionable career of the welfare regime analysis of the said type. Of course, any abstract contemplation for its own sake is, from a sociological perspective, questionable – it had been pronouncedly said that it is not a matter of philosophically reinterpreting the world but of obtaining with any analysis the means that enable political change. In this light there is nothing wrong with the fact that welfare regime analysis is a child of practical requirements of politics – it had been mentioned already that this was as well the case with the work presented by Wilensky and Lebeaux. However, the fact of social science being responsive towards political request nor the fact that social science can only be thought as theory of practice should not undermine the following two facts. First, any approach is mislead by taking the advice of being affirmative per se. Second, any reduction of social research on institutionalist – or moreover any reductionist – approach remains in the realm of establishing a wrong accountability.

It is in this regard relevant to see that – taking the later development – the debate on welfare capitalism was actually a direct answer on an at the time burning European issue: What had became known as Eurosclerosis was like a conflagration, undermining the anyway little trust into the process of European integration. Due to different moments it was getting obvious that the strategy of increasing European economic strength without the immediate consideration of the effects on people's daily life and without the factual consideration of issues of democracy was not going to work. Furthermore, the somewhat tokenist social policy of the early phases from the middle of the 1970s did not allow developing any sound perspectives for the future. Against this background, works dealing with the worlds of welfare capitalism had been of course welcome. They opened for politicians the opportunity to show (or at least to pretend) their seriousness of taking into account the reverence towards national traditions and showing at the same time their effort to improve what they claimed to be the social quality of European citizens.

3.4 Social Policy or Policy for Developing and Maintaining the Social

The term "*social quality*" had been used in the European Commission's Social Policy Agenda from 2000 (European Commission, 2000), though it had been suggested in a very limited perspective: as matter of social policy as distinct policy area – in this way reproducing the shortcoming which had been mentioned before: the inadequacy of a dichotomisation of social policies and economic policies (see for further discussion Herrmann, 2005 and 2007).[6] Such separation of social policy is very much the political complement of the reductionist approach[7] as delivered by welfare regime analysis. In a way this is surprising as Michel Albert presented another approach (see Albert, 1991) that would have allowed European policy makers a more integrated approach towards a European social competitiveness approach. However, the advantage of the chosen 'model' allowed at least to look for a more technical answer, maintaining the traditional departmentalised policy – by the way a strategy that was as well promoted by Albert.

In his scathing attack on European "reductionism", Clesse (2008), who must be called a real "insider" of the European strategy debate over the last years, comes to the following conclusion, which is of course not very pleasant for the neo-liberal mainstream:

"*Brussels is the weak, cold heart of the Union, regulating and de-regulating, imposing norms and standards, pumping money but not political content through the veins of the organisation. The EU is a gutless, spiritless, headless organisation held together by little else than material incentives. It is the kind of Europe the British or Scandinavians have always cherished, and that the other nations no longer have the spirit to oppose. There is now a serious risk of a slow erosion of the EU's basic ideological consensus, its political fabric and its social tissue. If so, Europe will be unable to avoid long-term*

[6] For a sequence of the European Commissions joint report on social protection see EC (2203, 2005, 2006, 2007 and 2007)

[7] On the "reductionist approach" see also Clesse, 2008.

economic decline. These trends may be accompanied and reinforced by resurgent nationalism and right-wing extremism that will focus on foreigners and immigrants, and specifically on Muslims" *(Clesse, 2008).*

In any case, the problem with all these paradigms is not least that they are very much oriented towards a static, statist and nationalist approach.[8] In addition they lack any vision of what the aims of policies actually are. By and large it can be said that this is very much a consequence of the institutionalism and its functionalist perspective of maintenance in the tradition of Parsonian thinking.

As such it fits indeed as well, from a sociological perspective, into the orientation of the Lisbon strategy of making Europe the most competitive region, a stance that had been recently confirmed in a document launched by the European Commission and being concerned with globalisation. As much as it has to be welcomed that the Commission actually emphasised that globalisation is a process that is not just to be observed but of which the developmental direction and its shape need to be influenced the fundamental shortcoming is that the document promotes the traditional way: following the Lisbon strategy, the aim of such influence is to gain competitive advantage. In this light, the view on social policy is that on its instrumental character, searching for its 'productive role'. The problem with such productivist orientation – and this is as well a fundamental problem of the model of the developmental welfare state – is that it actually reduces the economic perspective on applying a micro-economic perspective (see in general terms as well the remarks below when we look at an Extended Rational Choice and Methodological Individualism). It is important to highlight against such micro-perspective of a productive role of social policy that it is not about the contribution of social policy to economic development. Rather, the central issue is that we are looking at the interlink of economic and social development – of which social policy is one part but not more. In other words, what defines the macro-economic perspective is that view on the development of society itself and the task to develop a high priority for cohesion – though this has to be seen in a wider context as developed as part of the Social Quality Approach as it is briefly presented here as well.

3.5 Institutionalist Functionalism versus Social Development

A narrow micro-approach neglects a wider and more elaborated understanding of the social as outcome of the interaction and dialectic between people (constituted as actors) and their constructed and natural environment which allows to define social quality as the extent to which people are able to participate in the socio-economic, cultural, juridical and political life of their communities under conditions which enhance their well-being and individual potentials for contributing to societal development as well. A macro-approach allows opening the view on a developmental perspective that is not caught in the national enhancement orientation but seeks for developing a sustainable strategy that takes global issues into account. This means for welfare regime analysis that we have to overcome the functionalist determinism and equally the limited understanding of the relationship between economic and social policy as delivery, cost and supply relationship. Rather, properly understood as matter of global responsibility

[8] Where nationalist can as well mean that it is referring to a larger region as we find it now as the traditional and existing nation states. In this understanding it may include for instance the European Union

and systematic interrelationship – the economic processes being social relations and social processes being economic relations – the Social Quality Approach provides an alternative perspective on welfare system analysis, focusing on public policies rather than social policies. The challenge of this new approach is to build such a globally oriented conceptual framework, with which to analyse the mechanisms and their outcomes by applying its architecture, namely: (i) by defining the concept of 'the social', (ii) the recognition of the herewith ontologically related conditional factors, constitutional factors and normative factors, (iii) exploring the interaction of these three factors, and (iv) elaborating the measurement instruments of these factors in an epistemological acceptable way. These factors and its domains are captured in the following table (Scheme 2).

Scheme 2: Factors associated with the social quality approach.

Conditional Factors	Constitutional Factors	Normative Factors
socio-economic security social cohesion social inclusion social empowerment	personal security social recognition social responsiveness personal capacity	social justice (equity) solidarity Democratic based citizenship human dignity

It is decisive that any approach of defining meaningful practice for social policy has to consider:

(a) To shift from a reductionist approach of the traditional institutionalist patterns, moving towards a broader understanding of public policy, i.e. a policy in the public, by the public and for the public. It is important – and widely shown in the remainder of this chapter – that we are dealing with an integrated approach that entails economic, environmental, cultural, international and many other policies, social policy in the traditional understanding only one amongst others.

(b) Furthermore it is important to acknowledge that it is about the architecture, i.e. the interplay of the different factors that determine what these policies are about.

3.6 Extended Rational Choice and Methodological Individualism

Overall, any other approach that does not start from an understanding of the social as it is proposed in the preceding remarks[9] fails, in a sociological perspective, necessarily short of developing a sound social policy, be it that is competitive-nationalist or be it that it is competitive socially-divisonist – for the latter we see several examples in the so-called Asian tiger economies, the countries that only recently joined the European Union and the celebrated Celtic Tiger – all showing that economic progress had been largely paid for by an increasing inequality within the countries in question and as well an increasing divide between countries (cf. Schmieding, 2007, Herrmann: forthcoming; Alber and Lenarz, 2008).

[9] of course, this does not mean that the exact wording or even approach has to be subscribed to (for further discussion see the three books of the European Foundation on Social Quality for which details are available from www.socialquality.eu). However, it means that a sound theoretical discussion has to be entered.

To speak of extended methodological individualism suggests that the underlying assumptions of any welfare regime analysis are based in the rational choice of individuals but as well of systems. In other words, the current mainstream welfare regime approach starts from the postulation that social systems are actually behaving in a rational way and it is in this perspective that social policy – as distinct subsystems – are part of a productivity approach. The 'political extension' of such perspective is the notion that it is claimed that some scope is claimed (a) for defining what the output of the productive system should be (as some extent of internal equity, the role of education etc.) and (b) for the definition of the investment side of the social expenditure. If we look through much of the literature – and as well if we look at the current report presented by the European Commission – we find, from a sociological viewpoint, a reductionist approach towards assessing social expenditures. One can even go a step further, saying that what is actually measured is not the effectiveness of social expenditure. Instead the measurement is geared towards measuring the effect of individual beneficiaries. So, in actual fact it is not about the productive role of social policy in terms of its contribution towards the development of social spaces as it had been proposed with the definition of the social in the preceding section. Rather it is a matter of increased individual wellbeing. Such an understanding of effectiveness of social spending is as well fundamentally characterised by the acceptance of inequality and departmentalisation.

Looking at inequality first, we can see that a fundamental issue of current policies is for instance the frequent reference made to the role of education. Peter C.Y Chow from the World Bank Institute, for instance, writes that:

[s]ocial expenditure and economic development have interacted with each other in many developing economies …First of all, educational achievement and economic development have a reciprocal cause-and-effect relationship in the developmental process (Chow, 2008).

However, what is forgotten is that much of the educational orientation had been following a rather limited understanding, being to a large extent geared towards appropriation of skills rather than a holistic educational process. This can be evidenced by the huge number of foreign doctorates, aiming at importing skills rather than providing a broad and fundamental knowledge base for further development. Another point in this context can be seen within Europe: much of the *Bologna process* can actually be seen as strategy of marketing education and merchandising degrees rather than broadening access of the educational system. In this light the increasing 'investment' into the educational system, commonly celebrated as a success and the growing output in terms of graduating students can equally be seen as a lack of the preceding system: from own experiences and from talking to colleagues it is actually evident that the quality of the output is seen as largely decreasing. The point in question is the paradox that the increasing socialisation of education factually translates into a most profound individualisation which is linked to the commodification of education (see for instance Herrmann and Ryan 2005, Herrmann, forthcoming).

The entire widespread strategy of the privatisation of up to hitherto public (social) services disregards the fact that much of the investment, now undertaken by private investors, is probably more effective than public investment if we look in a short term and departmentalist perspective or a slightly extended version, namely the efforts to measure the net public social expenditure (see Adema *et al.*, 1996). However, even conventional wisdom of budgeting policies is more or less aware of the fact that both cross-sectional and inter-temporary dimensions need to be considered.

Three points are of crucial importance here – not least when it comes to measuring efficiency of social expenditure.

- First, taking the understanding of social services serious, we have to acknowledge that this is about the recognition of public responsibility. This means not least that any ambivalence with regard to the welfare state has to be rejected. Though there is without doubt the need of reforms, there is nevertheless the requirement to maintain its ability to perform.
- Second, this means as well to acknowledge the width of its performance. Again, looking in a micro-perspective at the performance issue may occasionally – though not necessarily –we may be facing advantages of private and small business use for achieving higher efficiency and/or better performance. However, in most of the cases it means that this is due to the fact that in this way negative externalities are produced at the same time, structurally bound to the processes of privatisation. As well the other way round, the provision of public services – and only this – can guarantee equality of opportunities, provision of cross-range social services etc.
- Third, this means that the suggested orientation of an increasingly targeted policy and the orientation on provision of services for the most disadvantaged, people who are furthest away from the labour market etc. is misleading: (a) In actual fact we see that it are those systems with a high rate of public provisions for the entire society – rather than the most excluded – that perform best. The successes of the Nordic countries are in the meantime well documented. (b) Furthermore it is important to highlight that any societal policy (and this goes beyond a simplistic and reductionist model of social policy) – has to aim on redistribution. As much as any analysis and policy has also consider influencing the actual economic process as matter of social relationships, it has to consider as well the redistributive role – questions of actual wealth (re-)distribution are one side, issues of distribution between the generations, between families with and without children or between healthy and ill people are just a few examples. And they actually show pretty well that existing systems, geared to establishing and maintaining social cohesion are rather effective – and in which way they are so. Although selective systems are or have to be efficient in providing particular services (and this can well mean: good services for a limited number of people) in terms of their character as social services fall short of quality performance. In other words, it still has to be acknowledged that they are redistributive as well, but being built on a principle of cherry picking, leaving a major burden to be carried by the public – an externality producing in this way social divergence rather than contributing to social cohesion.

With respect to welfare regime analysis there is then as well an approach that actually goes beyond the decommodifiction issue and takes, instead, account of the social dimension of economic integration. In other words, the one – and somewhat reductionist – dimension of social policy is to which extent people are taken out of the obligatory system of employment. However, another dimension is the degree and way of including people into the labour market for instance via active labour market policies – and instructive example can be taken from Powell's and Barrientos' (2004) work.

However, this still leaves aside that the conceptualisation of social expenditure falls short of the said wider definitional background as suggested – though the concept is well known it is rarely applied when we look especially at recent debates. If we take social quality as point reference rather than 'wellbeing' – be it the wellbeing of individuals or the 'social wellbeing' – the multidimensionality of the challenge is systematically faded out. The concept known is the one of public goods or non-cash merit goods. However, it is rarely taken up as it is more or less difficult to calculate. The more fundamental question – and this is one that goes through the wider conceptualisation of social expenditure literature – is that the underlying approach refers to goods – to an understanding of a commodifiable character of welfare. Leaving aside general issues of discussions around the 'general interest' (see Herrmann, 2007; Herrmann, 2007) the core problem here is that the concept of a public good or non-cash merit good is misleading as it still suggests an exchange relationship – then very much leading as well to the dichotomisation of suppliers and users – the problematic and not least theoretical challenge cannot be discussed here.

In an international and global perspective respectively a point of departure for reshaping the debate may be seen in a contribution made some time ago by Ian Gough, writing on Globalization and Regional Welfare Regimes (Gough, 2001). He points importantly on the complex interaction of:

- International Factors
- Socio-economic Environment
- Political Mobilization
- State Institutions
- Social Policies

(ibid.: 168)

Important in this work is that Gough goes beyond the standard social policy orientations – balancing input and output – and largely includes the welfare mix and more importantly work-related issues, thus the 'social dimension of economics'.

Another important sociological discussion is around an extended understanding not of wellbeing or social expenditure but more importantly about economic growth. There is of course not much doubt about the need of economic growth. However the understanding of what such growth is about is definitely another and still open question. In this respect we find different approaches – on the one hand aiming on developing a different understanding of the individuals status (for instance the work by Amartya Sen 1987 and 1992; for an overview see www.justpeace.htm) or the different approach towards measuring the same (see e.g. Canoy and Lerais, 2007) – a kind of mediating position can be seen in the work on the Human Development Reports as elaborated by the United Nations (see http://hdr.undp.org/en.[10]

In other terms and coming back to the earlier debate of welfare regimes and world of welfare capitalism, we are looking for an alternative by considering a sound theory and criteria for an empirical analysis that looks at 'welfare production' not along the axis of commodifcation versus decommodification. Instead, it is the search for criteria that

[10] See furthermore Addison and Heshmati (2004); Bhandari and Heshmati (2007); Heshmati (2003, 2006a and 2007); Heshmati and Oh (2006); and Heshmati and Tausch (2007).

reflect the public versus private and the reflection of social relationships not least as matter of responsibilities and the development of societies and communities to develop in an integrated and sustainable way. Precisely the rigorous social indicator approach, chosen by the United Nations Development Programme, seems to be a strategy, which should be applied more frequently to the European social policy debate.

An interesting contribution comes here from Ian Gough who arrives at a typology that is not limited to input-output analysis but combines the outcome analysis with the analysis of a combined provider/social reality analysis. Looking in this perspective on Human-Well-Being and Social Structures and taking a global perspective, he arrives at the following:

more specific regime types in different zones of the world: mixed liberal-informal welfare regimes in Latin American countries outside of the Caribbean; productivist welfare regimes in East-Asia, informal security regimes in South Asia; and a generalized insecurity system in much of Africa. (Gough, 2004: p. 301)

However, as helpful as such an approach is, the problem remains unresolved, in which way the subjective dimensions Gough talks about can be taken out of a real of arbitrariness. In the view of the present analysis, the reference made to Habermasian discourse-theories falls short resolving such problems, in particular when it comes to developing a global perspective.

There is a further important conclusion that has to be drawn from here: critics of welfare regime analysis are to a large extent concerned with the fact that Esping-Andersen moulded approaches are neglecting certain aspects – e.g. the role of women and gender divides in terms of ‘background features’, maintaining the welfare systems, the role of NGOs as additional ‘suppliers’ of services etc. (by the way aspects Esping-Andersen took up in his later work).

A further point in question is of course minority rights. Clesse (2008) with justification says:

A dramatic example of this wrong-headed approach has been the issue of minority rights. The Union failed to apply the criteria it had set in Copenhagen by choosing to ignore the disastrous situation of the Roma in many central and eastern European countries, above all in Romania where up to 2.5m people of that ethnic group live in abject poverty and are daily victims of contempt and discrimination. Their situation is not much better in Slovakia and in some other neighbouring countries. It is only now, with the Roma having come to Rome, that the Romans want to put the issue high on the EU agenda. Unfortunately, the incentives for Romania and the others to act, and the means of pressure available to other member states are limited. (Clesse, 2008)

However, in general, the question of what the actual social outcome is about is not even considered by the critics. This means as well to reduce measuring the efficiency of social spending on issues of a link that is theoretically established as causal relationship.[11] In other words, social policy is as such defined in an extremely narrow way: a matter of mechanical cause-effect relationship. However, no social policy works in this way. In a project on social services, this view was specifically widened not by

[11] For discussion of measuring aggregate social efficiency see Ravallion (2005).

looking at a wider understanding of input-output factors. Rather, the challenge had been seen as a matter of enhancing the field of measuring itself, seeing it as matter of multidimensional dialectical relationships. There focusing on social services, the given definition had been proposed as

These are any activity that is undertaken

- to enhance individuals' well-being and
- that is based on human and social rights,
- that contributes to the cohesion of the community and wider social relationships and at the same time enables or empowers the individuals concerned (Herrmann: 2005; for a wider analysis and debate see various contributions in Herrmann et al. 2007)

However, decisive is in this context the different approach with regards to 'users' or beneficiaries, broadly falling under society, the state as institutionalist system and the 'clients' in the traditional sense of beneficiaries of social policies. In other words, the perspective taken here is the one of a citizen-approach.

This can be used as blueprint insofar as it overcomes at least to some extent the general trend of understanding social services in particular and social policy in general as commodifiable. This point again on a fundamental shortcoming of the mainstream welfare regime analysis: Emphasising the decommodifying aspects of social policy, it falls short of critically analysing the actual character of social policy, social benefits and social services. As correct as it is to look at their institutional forms and impact, they are primarily in themselves social relationships and subsystems of a wider social relationship – and it is only by measuring this that the real meaning can be made out.

One element of this is that the debate has to include not least the political dimensions as it goes beyond the institutional political system, and aims on the political structures, including the role social policy plays in respect to the 'life world'-dimension of the democratic process – matter that is relevant in terms of developing the integrity of the system, the mobilisation of different forces and the way of how the system relates in a global context (see for instance Cook and Kwon, 2007).

A further crucial element to it is the need of developing a sound concept of socio-economic sustainability in the context of globalisation. However, the mainstream approach is concerned with the competitive side of globalisation. If we take together two major EU-statements – on the one hand the Lisbon agenda emphasising the goal of developing Europe's competitiveness, on the other hand the more recent claim that globalisation is not something Europe just has to face but that it can be and has to be influenced and shaped by the EU – it shows a decisive shortcoming. In this light, any strive for social cohesion and sustainability is limited by its orientation towards the competitiveness pillar. In simple terms it means that externalities are produced and these will – over short or long – resurge as real and actual 'costs', be they economic or social costs. This is the case on a global level and also within the EU where we find shifts and rebalances but no real strategic changes. The standard indicators are very much geared to a mono-causal approach to specific 'problems'. However, the foregoing debate on welfare regimes and the efficiency of social expenditure should have shown that this is insufficient. And the brief introduction of the social quality approach will have shown a way for policy analysis and policy making. For instance, while the ranking of countries in particular policy areas is informative, it is not apparent how it should be used in the policy process. A similar ranking derived from the social quality concept would point directly to policy domains and sub-domains in socio-economic security, social cohesion, social inclusion and social empowerment and the connection between them.

4. TOWARDS A CRITIQUE OF THE COMMISSIONS METHODOLOGY

However much the present authors emphasize the great theoretical and empirical value of this definition, given in the European Commission paper, they allow themselves to remark that the far-reaching conclusions listed in the European Commission paper, are not supported by the empirical data, presented in the paper, let alone, by a solid econometric or politometric analysis in the spirit of the above definition. A number of authors from the economics profession, like Addison (2006); Addison and Heshmati (2004); Aiginger et al. (2007); Aiginger (2008); Apps and Rees (2004); Atkinson (2005); Atkinson, et al (2002); Atkinson, Marlier and Nolan (2004); Barr (1998); Barro and Lee (2000); Bhandari and Heshmati (2007); Harris (2004); Heshmati (2003, 2006b and 2007); Heshmati and Oh (2006); Heshmati and Tausch (2007); Jayasuriya (2006 and 2008); Papadopoulos and Tsakloglou (2003); Tausch, 2006), Rein (1970 and 1976) were always conscious about the limitations of the strictly "micro"-approach, referred to above in our sociological theory chapter, and opted for perspective, which is compatible with the overall objectives of the "social quality approach" and the work inspired by the indicator work of the United Nations Development Programme, pioneered by the work of Amartya Sen.

In addition, the European Commission paper uses poverty data from the early 2000s, and not the very latest Eurostat figures for 2006, which already are available and which already cover well the situation of social exclusion in the entire EU-27.

Let us present the facts, as they are mentioned in the European Commission paper, and let us apply some analytical reasoning [presented in non-mathematical language] and the above quoted definition from the very European Commission paper.

It is a well-known fact from cross-national social science aggregate data research, that simple percentage differences often lead to biased results, especially in situations like the one, when we compare poverty rates before and after social transfers over a very wide range countries, where initial before transfer poverty rates range from 17 to 30 percent of total population, while after social transfer the range is from 10 to 23 percent (see Table 2). It is entirely possible that percentage point measured poverty reduction rates are a clear statistical function of initially very high before transfer poverty rates, i.e. it is much easier to reduce poverty at very high initial levels, while it is more difficult to have a good performance for the countries, characterized by initially low before taxation poverty rates. The countries are also performing differently in their objectives and in effectiveness in reducing the rate of poverty. The results in Table show that Sweden and Czech Republic are most effective and Greece and Latvia are least effective countries in social transfer and poverty reduction.

Table 2: Poverty before and after social transfers: an analytical approach, based on regression residuals (Eurostat figures, 2006)

	poverty before social transfers[12]	poverty situation after social transfers[13]	predicted value (regression analysis: poverty before social transfers predicting poverty after social transfers)	Residual (measure how far the real value is away from the predicted value)	Poverty situation after transfers better than expected (in % points)[14]
Sweden	29	12	16,83	-4,83	4,83
Czech Republic	22	10	14,73	-4,73	4,73
Denmark	28	12	16,53	-4,53	4,53
Netherlands	21	10	14,43	-4,43	4,43
Finland	29	13	16,83	-3,83	3,83
Slovenia	24	12	15,33	-3,33	3,33
Germany	26	13	15,93	-2,93	2,93
Austria	25	13	15,63	-2,63	2,63
France	25	13	15,63	-2,63	2,63
Slovakia	20	12	14,13	-2,13	2,13
Luxembourg	24	14	15,33	-1,33	1,33
Belgium	27	15	16,23	-1,23	1,23
Hungary	30	16	17,13	-1,13	1,13
Malta	22	14	14,73	-0,73	0,73
Ireland	33	18	18,03	-0,03	0,03
EU(25 countries)	26	16	15,93	0,07	-0,07
EA13	25	16	15,63	0,37	-0,37
Bulgaria	17	14	13,23	0,77	-0,77
Cyprus	22	16	14,73	1,27	-1,27
United Kingdom	30	19	17,13	1,87	-1,87
Poland	29	19	16,83	2,17	-2,17
Estonia	25	18	15,63	2,37	-2,37
Portugal	25	18	15,63	2,37	-2,37
Romania	24	19	15,33	3,67	-3,67
Lithuania	27	20	16,23	3,77	-3,77
Italy	24	20	15,33	4,67	-4,67
Spain	24	20	15,33	4,67	-4,67
Greece	23	21	15,03	5,97	-5,97
Latvia	28	23	16,53	6,47	-6,47

[12] At the usual 60% of median income threshold.

[13] For a graphical presentation, see Graph 2 of this work

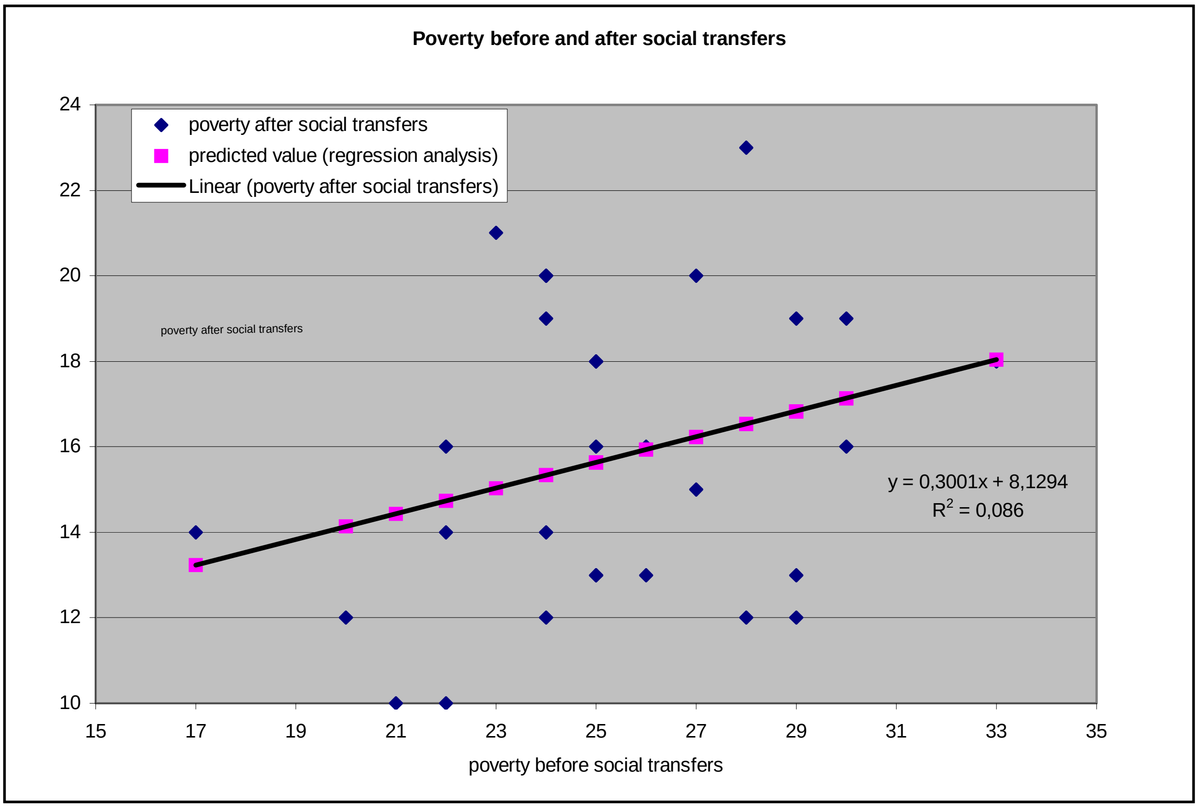
[14] Poverty is a negative phenomenon, thus the residuals had to be reversed.

Source: Our own calculations from ECFIN/E3(2007)/REP/50604 and Eurostat data. Computer Software Microsoft EXCEL 2000 and 2003. The fourteen Lisbon indicators can be downloaded free of charge from the Eurostat website at:

http://epp.eurostat.ec.europa.eu/portal/page?_pageid=1133,47800773,1133_47802558&_dad=portal&_schema=PORTAL. This site also informs about the "short list" of the indicators, on methodology, quality profiles etc.

Graph 1 shows the data for column (1) and (2) on poverty before and after social transfer from the Table 2 in the form of a simple scatter-plot. The two poverty measures are positively correlated (0.30). The fit of the model is quite low and poverty before transfers explains only a small fraction (8.6%) of variations in poverty after social transfers. Several outliers cause the positive low relationships between the two measures.

Graph 1: The real reduction of poverty risk



Source: Our own calculations from ECFIN/E3 (2007)/REP/50604 and Eurostat data. Computer Software Microsoft EXCEL 2000 and 2003

Table 3 now shows the simple method, which was applied in the European Commission study, which did not use the latest available Eurostat figures, but some older Eurostat data, most probably used in order to provide a good time-match with the other data presented. The method reports the simple difference before and after which as expected is positive and a result of positive social transfers. However, it does not make any statistical association between before and after social transfer levels and neither it produces a metric measure linking the countries poverty reduction objectives and outcomes. The simple difference shows that Sweden, Finland and Denmark are most successful in their poverty reduction, while Greece, Bulgaria, Italy and Spain are least successful countries.

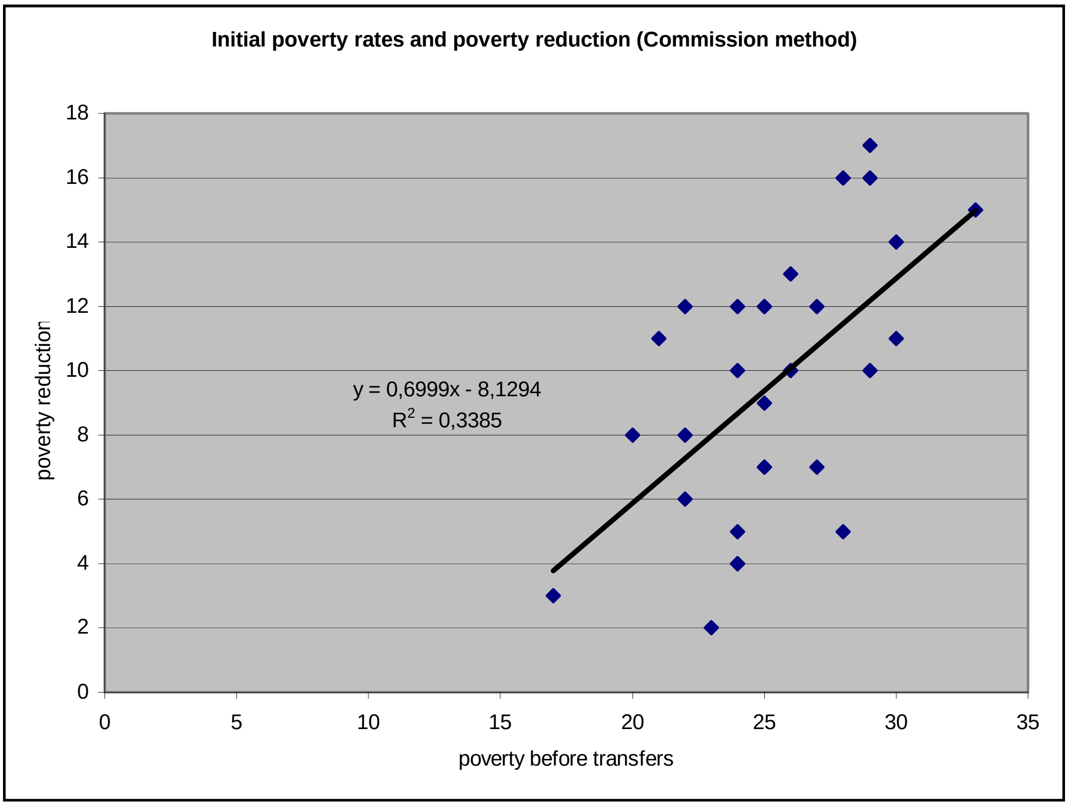
Table 3: The European Commission method to calculate the reduction of poverty (page 36 of their study)

	Poverty before social transfers	Poverty after social transfers	European Commission method of calculating the change of poverty in %-points (% before minus % after social transfers)
Austria	25	13	12
Belgium	27	15	12
Bulgaria	17	14	3
Cyprus	22	16	6
Czech Republic	22	10	12
Denmark	28	12	16
EA13	25	16	9
Estonia	25	18	7
EU (25 countries)	26	16	10
Finland	29	13	16
France	25	13	12
Germany	26	13	13
Greece	23	21	2
Hungary	30	16	14
Ireland	33	18	15
Italy	24	20	4
Latvia	28	23	5
Lithuania	27	20	7
Luxembourg	24	14	10
Malta	22	14	8
Netherlands	21	10	11
Poland	29	19	10
Portugal	25	18	7
Romania	24	19	5
Slovak Republic	20	12	8
Slovenia	24	12	12
Spain	24	20	4
Sweden	29	12	17
United Kingdom	30	19	11

Source: Our own calculations from ECFIN/E3(2007)/REP/50604 and Eurostat data. Computer Software Microsoft EXCEL 2000 and 2003

However, as we will show in Graph 2 of this paper, there is a systematic bias involved in this method. The graph shows the relationship between initial poverty before social transfers and the rate of poverty reduction. The simple regression results show that the "badies", i.e. countries with terribly high before-transfer poverty rates, become the "goodies". This is reflected in the high fit of the model or strong positive association between poverty before social transfer and the poverty reduction rate as a result of social transfers.

Graph 2: Dependence between initial levels of before-taxation poverty rates and poverty reduction outcome, as measured by the EU-Commission.



Source: Our own calculations from ECFIN/E3 (2007)/REP/50604 and Eurostat data. Computer Software Microsoft EXCEL 2000 and 2003

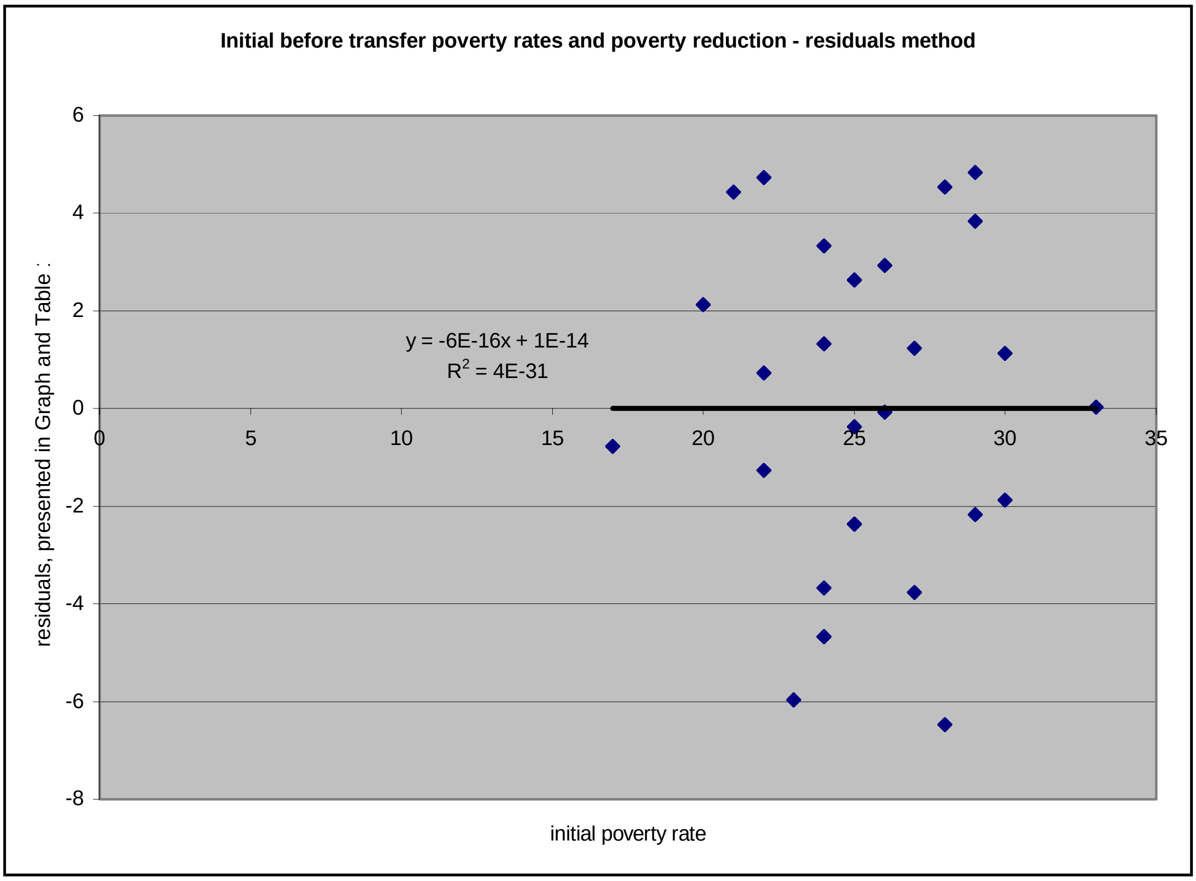
5. A COMPARISON OF OUR AND THE COMMISSIONS METHODOLOGY

Our method of calculating the success of poverty reduction, by using the simple residuals from the linear regression is expressed as:

(1) $$PRAT_i = \alpha + \beta\ PRBT_i + \varepsilon_i$$

where *PRBT* is the poverty rates after transfers, *PRBT* is the rate before transfer, α and β are unknown parameters to be estimated, ε is the residual and the subscript *i* indicate the country. Graph 3, yields the following dependency of the results from initial before transfer poverty levels. As to be expected, our new method is far superior to the simplistic method, used by ECOFIN, and there is no correlation at all between initial levels of poverty and success in poverty reduction, as measured by the residuals method, presented in Table 2 and in Graph 1 of this paper.

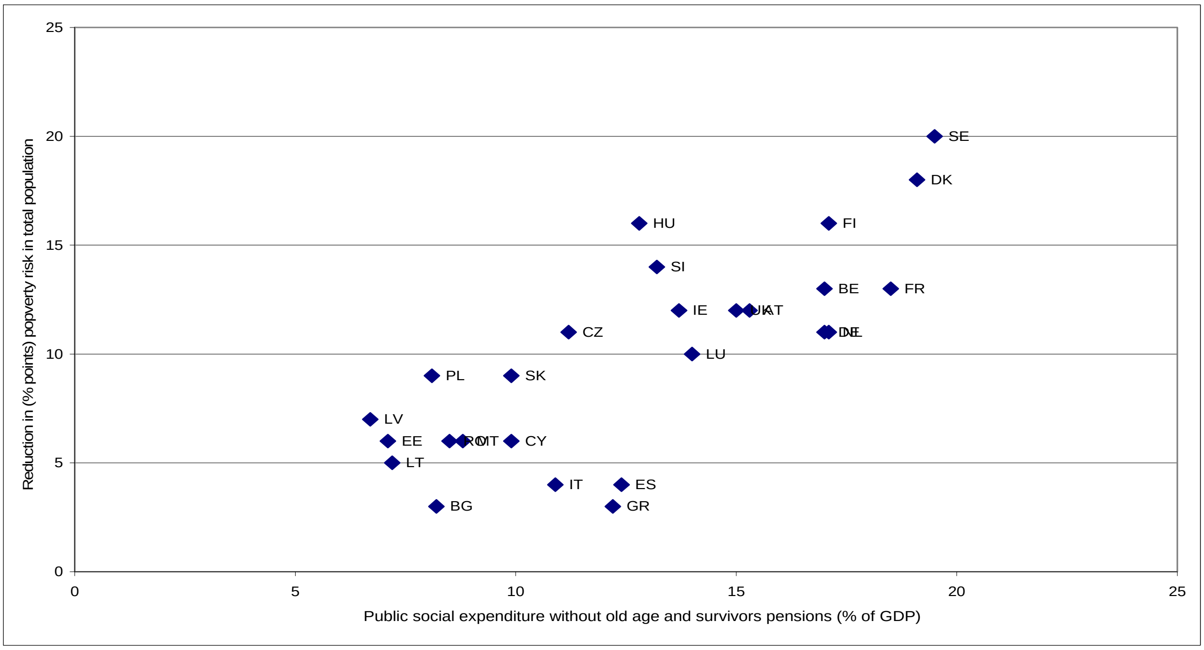
Graph 3: Dependency from initial before transfer poverty levels and policy outcome in form of poverty reduction rate.



Source: Our own calculations from ECFIN/E3 (2007)/REP/50604 and Eurostat data. Computer Software Microsoft EXCEL 2000 and 2003

Measuring poverty reduction in a very biased way and it will lead to results, which are in turn biased. We thus will use in our empirical estimates of the efficiency of social expenditures our own, unbiased estimates, and not the heavily biased methodology, used in the ECOFIN paper. Just as footnote we also say here that by using a simplistic methodology, the European Commission paper arrives at a Graph, which by the way contradicts much of their verbal argument, heavily in favour of a neo-liberal policy agenda of further liberalizing markets. In Graph 4 we report the European Commission approach of reduction of poverty risk.

Graph 4: The European Commission version of the reduction of poverty risk, depending on social expenditures (*x* axis)



Source: European Commission paper, calculated on the base of Eurostat-EU-SILC, page 36 (there: Figure 12: named "The relationship between social expenditures (without pension and survivors benefits) in % of GDP and the reduction of poverty risk")

This graph is of course reproducible with the empirical data, used in this paper. It shows the relationship between reductions in poverty risk and public social expenditure. The relations is as expected positive suggesting the higher the social spending, the higher is reduction in poverty risk. Table 4 reports the social expenditures as share of GDP and the reduction of poverty computed by the European Commission method as the difference between in poverty reduction before and after social spending. The social expenditure as share of GDP is highest in Sweden and France, while it is lowest in all three Baltic countries. Despite low level of social expenditures the later show significant reductions in their poverty rates.

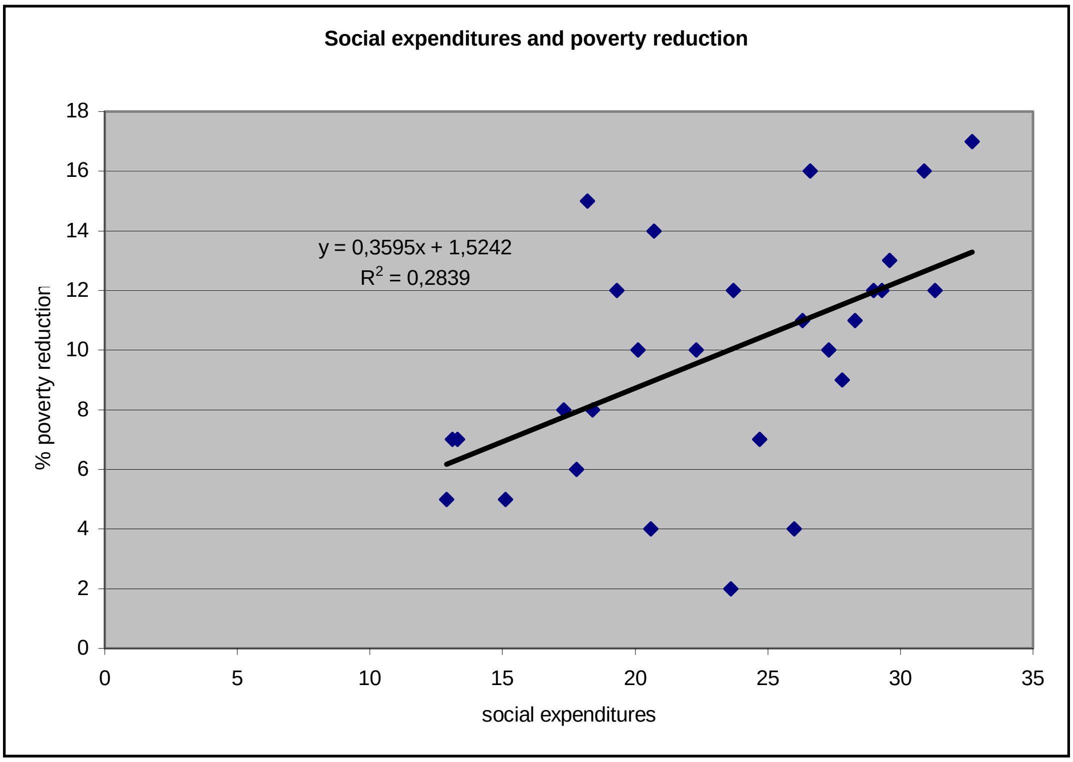
Table 4: Social expenditures and poverty reduction – the European Commission method

	Social expenditures per GDP	European Commission method of calculating the reduction of poverty in %-points (% before minus % after social transfers)
Austria	29,0	12
Belgium	29,3	12
Cyprus	17,8	6
Czech Republic	19,3	12
Denmark	30,9	16
EA13	27,8	9
Estonia	13,1	7
EU25	27,3	10
Finland	26,6	16
France	31,3	12
Germany	29,6	13
Greece	23,6	2
Hungary	20,7	14
Ireland	18,2	15
Italy	26,0	4
Latvia	12,9	5
Lithuania	13,3	7
Luxembourg	22,3	10
Malta	18,4	8
Netherlands	28,3	11
Poland	20,1	10
Portugal	24,7	7
Romania	15,1	5
Slovak Republic	17,3	8
Slovenia	23,7	12
Spain	20,6	4
Sweden	32,7	17
United Kingdom	26,3	11

Source: Our own calculations from ECFIN/E3(2007)/REP/50604 and Eurostat data. Computer Software Microsoft EXCEL 2000 and 2003.

The European Commission says in its paper that “the trade-off between efficiency and long-term financial sustainability of welfare systems and equality is not inevitable” (ECOFIN 2007, page 9). However, their own empirical method, updated by most recent Eurostat data, would suggest a heavy social-Keynesian reading of events. Graph 5 shows the positive relationship between percentage poverty reduction and social expenditure share of GDP. The two variables are highly correlated (0.36) and social expenditure explains 28% of variations in the percentage poverty reduction among the countries.

Graph 5: Social expenditures and poverty reduction relationships



Source: Our own calculations from ECFIN/E3(2007)/REP/50604 and Eurostat data. Computer Software Microsoft EXCEL 2000 and 2003

6. RELIABLE ESTIMATES OF THE EFFICIENCY OF SOCIAL POLICY

Let us now leave these measurement bias issues aside, and let us arrive at the real issues. First we present the statistical data as they really should be presented. The social expenditure share of GDP and percentage poverty better than expected after social transfers is reported for the sample countries in Table 5. The later is obtained as residual from regression of initial poverty on poverty after social transfer.

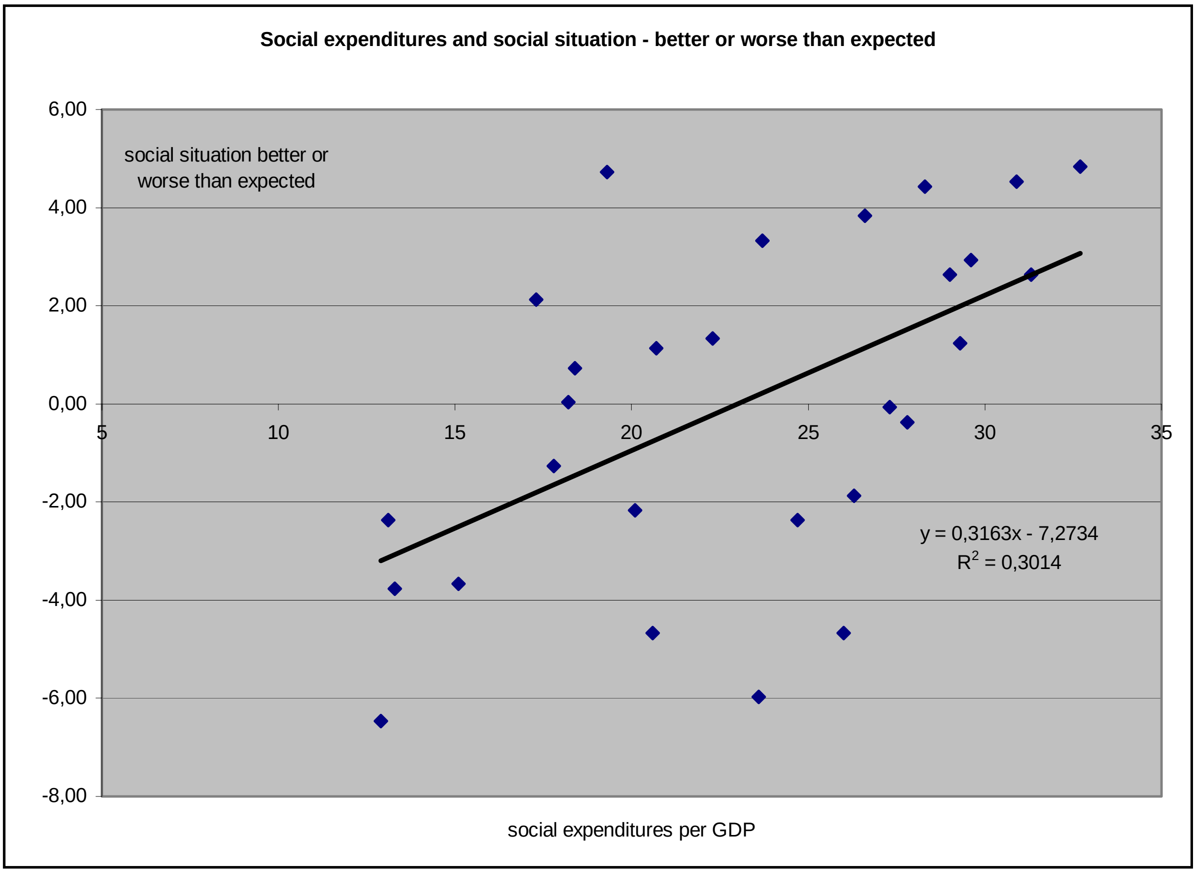
Table 5: Social expenditures and poverty reduction – the "proper" results, based on the correct method of Table 2, and Graph 1 of this work

	Social expenditures per GDP	poverty situation after transfers better than expected (in % points)
Austria	29,0	2,63
Belgium	29,3	1,23
Cyprus	17,8	-1,27
Czech Republic	19,3	4,73
Denmark	30,9	4,53
EA13	27,8	-0,37
Estonia	13,1	-2,37
EU25	27,3	-0,07
Finland	26,6	3,83
France	31,3	2,63
Germany	29,6	2,93
Greece	23,6	-5,97
Hungary	20,7	1,13
Ireland	18,2	0,03
Italy	26,0	-4,67
Latvia	12,9	-6,47
Lithuania	13,3	-3,77
Luxembourg	22,3	1,33
Malta	18,4	0,73
Netherlands	28,3	4,43
Poland	20,1	-2,17
Portugal	24,7	-2,37
Romania	15,1	-3,67
Slovak Republic	17,3	2,13
Slovenia	23,7	3,33
Spain	20,6	-4,67
Sweden	32,7	4,83
UK	26,3	-1,87

Source: Our own calculations from ECFIN/E3 (2007)/REP/50604 and Eurostat data. Computer Software Microsoft EXCEL 2000 and 2003

The result from regression of social situation on social expenditure is reported in Graph 6. This yields a graph, from which it is possible to draw the conclusion that the variance explained by social expenditures in poverty reduction is even greater than the one, which is implied by the European Commission methodology. For each percentage increase in social expenditure, the poverty rate declines by 0.32 percent. Social expenditure alone explains 30% of the variations in poverty rate. The reduction impact differs among the sample countries resulting in different effectiveness and gap between expected and observed poverty outcomes.

Graph 6: Social expenditures and the social situation



Source: Our own calculations from ECFIN/E3(2007)/REP/50604 and Eurostat data. Computer Software Microsoft EXCEL 2000 and 2003

According to our analysis reported in Table 6, the most efficient countries are the Czech Republic, the Slovak Republic and Slovenia, while the most inefficient trade-offs are to be encountered in Spain, Italy and Greece. France is serving as the reference group with perfect prediction.

Table 6: The real efficiency of social expenditures in Europe

	Social expenditures per GDP	Poverty situation after transfers better than expected (in % points)	predicted value (linear regression: expenditures -> improvement of the social situation)	residual (efficiency of social expenditures)
Czech R	19,3	4,73	-1,17	5,90
Slovak R	17,3	2,13	-1,80	3,93
Slovenia	23,7	3,33	0,22	3,11
Netherlands	28,3	4,43	1,68	2,75
Finland	26,6	3,83	1,14	2,69
Malta	18,4	0,73	-1,45	2,18
Denmark	30,9	4,53	2,50	2,03
Hungary	20,7	1,13	-0,72	1,86
Sweden	32,7	4,83	3,07	1,76
Luxembourg	22,3	1,33	-0,22	1,55
Ireland	18,2	0,03	-1,52	1,55
Germany	29,6	2,93	2,09	0,84
Estonia	13,1	-2,37	-3,13	0,76
Austria	29,0	2,63	1,90	0,73
Cyprus	17,8	-1,27	-1,64	0,37
France	31,3	2,63	2,63	0,00
Lithuania	13,3	-3,77	-3,07	-0,70
Belgium	29,3	1,23	2,00	-0,76
Romania	15,1	-3,67	-2,50	-1,17
Poland	20,1	-2,17	-0,91	-1,25
EU25	27,3	-0,07	1,36	-1,43
EA13	27,8	-0,37	1,52	-1,89
Portugal	24,7	-2,37	0,54	-2,91
UK	26,3	-1,87	1,05	-2,92
Latvia	12,9	-6,47	-3,19	-3,28
Spain	20,6	-4,67	-0,76	-3,91
Italy	26,0	-4,67	0,95	-5,62
Greece	23,6	-5,97	0,19	-6,16

Source: Our own calculations from ECFIN/E3(2007)/REP/50604 and Eurostat data. Computer Software Microsoft EXCEL 2000 and 2003

7. THE CORRELATES OF THE EFFICIENCY OF SOCIAL EXPENDITURES

Our correlations with the ECOFIN data imply that health care expenditures and family centred expenditures are very important predictors of an efficient poverty reduction, while large employer's shares in social security financing are – under the conditions of European market economies, 2008, an important factor working against an efficient poverty reduction. The list of indicators of lifting people out of poverty and their poverty reduction effects is given in Table 7.

Table 7: Lifting people out poverty – the correlations

	Lifting people out of poverty. Correlation (Pearson Bravais) with "poverty situation better than expected"
Health care, Sickness and disability % GDP	0,682
Family with children % GDP	0,606
Social expenditure	0,563
Unemployment % GDP	0,440
Housing and Social exclusion % GDP	0,438
Protected persons' share	0,358
Old age and survivors % of GDP	0,236
General government contributions as % of financing of total social security contributions	0,042
Total social security contributions as % of total financing of social security contributions	-0,017
Other sources	-0,074
Employers' share	-0,230

Source: Our own calculations from ECFIN/E3(2007)/REP/50604 and Eurostat data. Computer Software Microsoft EXCEL 2000 and 2003

Similar tendencies emerge from our calculations about direct efficiency rates of social expenditures which are reported in Table 8. Centring social expenditures on family expenditures increases these efficiency rates, while especially generous pension systems are a good guarantee against an overall high efficiency rate of social expenditures.

Table 8: The correlations of the efficiency of social policy

	Efficiency of social expenditures. Correlation (Pearson Bravais) with the residual measure, presented in Table 6 of this paper
Family with Children % GDP	0,365
Protected persons' share	0,225
Health care/ Sickness and disability % GDP	0,207
Housing and Social exclusion % GDP	0,170
Total social security contributions as % of total financing of social sec contributions	0,143
Unemployment % GDP	0,049
Employers' share	0,003
Other sources	-0,066
General government contributions as % of financing of total social sec contributions	-0,128
Old age and survivors % of GDP	-0,283

Source: Our own calculations from ECFIN/E3(2007)/REP/50604 and Eurostat data. Computer Software Microsoft EXCEL 2000 and 2003

In the following, in Table 9, we will present an alternative approach, based on the factor analysis of the empirical ECOFIN and Eurostat data. Our SPSS XIV factor analysis was based on Eigenvalues 1, and on principal component analysis. The original data for the factor analysis are presented in Table 9. The typology table show presence of significant heterogeneity across countries by 9 indicators. Old age and survivors % of TB; the General government contributions as % of financing of total social sec contributions; Health care/ Sickness and disability % TB, and Employers' share are the highest contributors, while Housing and Social exclusion % TB; Unemployment % TB and other sources are the lowest contributors to poverty reduction.

Table 9: An alternative typology, based on the recent ECOFIN paper

	Family/Children % TB	Health care/ Sickness and disability % TB	Housing and Social exclusion % TB	Old age and survivors % of TB	Unemployment % TB	General government contributions as % of financing of total social sec contributions	Employers' share	Protected persons' share	Other sources
Austria	10,7	33,5	1,4	48,4	6,0	33,0	37,9	27,3	1,4
Belgium	7,5	34,3	1,8	43,9	12,5	24,6	51,3	22,0	1,7
Cyprus	11,4	28,6	6,9	48,0	5,1	53,8	19,5	14,8	11,4
Czech R	8,6	43,3	3,2	41,2	3,7	18,0	54,5	26,5	1,1
Denmark	13,0	34,3	6,0	37,3	9,3	63,3	10,2	18,4	7,9
EA13	8,3	35,5	2,6	46,4	7,2	33,8	40,1	22,6	3,5
Estonia	12,4	41,1	1,6	44,2	1,6	20,3	79,7	0,8	0,0
EU25	8,0	36,1	3,4	45,6	6,5	37,6	38,3	20,6	3,5
Finland	11,6	38,8	3,1	36,8	9,7	43,6	38,9	11,5	6,1
France	8,5	35,7	4,4	43,5	7,8	30,6	44,8	21,0	3,9
Germany	10,9	35,1	2,5	43,5	8,4	35,8	35,1	27,8	1,7
Greece	7,0	31,4	4,8	51,1	6,1	30,8	35,6	22,8	10,8
Hungary	12,3	39,9	2,5	42,4	3,0	34,6	42,1	15,9	7,5
Ireland	14,7	45,3	5,3	27,1	7,6	54,1	24,7	15,5	6,2
Italy	4,4	32,3	0,4	61,0	2,0	41,4	41,8	15,3	1,5
Latvia	10,6	34,1	1,6	49,6	3,3	35,3	47,4	16,5	0,8
Lithuania	8,5	39,5	2,3	47,3	1,6	39,9	53,8	6,3	0,7
Luxembourg	17,4	38,8	2,7	36,5	4,6	45,3	26,7	24,6	3,4
Malta	4,9	33,5	3,3	50,5	7,7	34,2	43,5	19,0	2,7
Netherlands	4,9	41,3	6,1	42,0	6,1	19,8	33,4	34,3	12,2
Poland	4,6	31,0	1,5	59,4	3,6	39,2	27,9	22,5	10,3
Romania	10,1	43,2	4,1	38,5	3,4	11,8	50,0	23,5	14,7
Slovak R	10,8	38,9	3,0	41,3	6,0	14,3	61,9	22,6	1,8
Slovenia	8,6	40,5	3,0	44,8	3,0	31,8	27,5	39,8	0,8
Spain	5,4	38,1	1,5	42,1	12,4	33,3	49,1	15,8	2,3
Sweden	9,8	40,0	3,8	40,3	6,3	48	41,1	8,7	2,2
UK	6,6	39,5	6,2	44,6	2,7	50,6	32,5	15,5	1,5

Source: Our own calculations from ECFIN/E3(2007)/REP/50604 and Eurostat data. Computer Software Microsoft EXCEL 2000 and 2003

8. ON THE MATHEMATICAL MODEL

In the literature we find both of quantitative and qualitative methods to measure outcomes of activities. One can also distinguish among parametric and non-parametric approaches. Each method they have their benefits and limitations. Outcomes are often multidimensional and are represented by multiple indicators with both positive and negative effects on the outcomes. However, our objective here is not to evaluate effects of certain policy programs, but rather to quantify the state of an object to be studied. The multidimensionality of outcomes requires the creation of composite indices to have a single measure and to be able to aggregate identifiable relevant indicators in a satisfactory way. Here the focus is on the construction of an index that is multidimensional and decomposable to use it in describing the social policy process in European Community. Such an index will be a useful tool in the evaluation of the outcome of the member countries efforts, the policy impacts on development in the region and in the quantification of the progress in achieving the Unions stated goals. In this section, we introduce a parametric approach to compute composite indices frequently used in the evaluation of outcomes of policies and for the ranking of countries based on their performance.

The literature on index numbers is diverse and volumes. These are the principal component (PC) analysis and factor analysis (FA) which can be also used in the computation of an index for the social policy process.[15] The basic idea with these methods is to combine several variables into a smaller set of independent variables without loosing the essential information from the original data. Thus, the issue first was how to combine different indicators related to the Lisbon process into a single measure of its progress. In this study, we adopt the factor analysis approach. Since the two methods in normalized form give principal component scores with unit variance, we use only the factor analysis results in the analysis of the social policy process.

Factor analysis is a multivariate technique for examining relationships within a set of interrelated quantitative variables or a common factor. The common factors are not observable and assumed by construction to be independent from each other. The explanatory variables or indicators, which are linearly related to each other, are combined within a single common factor. The correlation between the explanatory variables is explained by the common factors, while the remaining variance of a variable is attributed to a unique factor. The factors are derived in such a way that each maximizes the percentage of total variance attributed to each of the successive factors. The greater the variance share of the variables explained by the common factors, the better is the fit of the factor model and the more accurate is the composite index and the rank of countries.

Given a dataset with j numeric variables or indicators, at most p factor components can be computed, each being a linear combination of the original indicators with coefficients equal to the eigenvectors of the correlation of the covariance matrix. Mathematically the factor model is written as:[16]

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[15] For recent surveys on the literature on the use of composite indices in different development research context see also Archibugi and Coco (2004), Grupp and Mogee (2004), Heshmati (2003), Andersen and Herbertsson (2003) and Nasierowoski (2007).

[16] See also Andersen and Herbertsson (2003).

(2) $$Y_{ji} = A_{jp} X_{pi} + B_j E_{ji}$$

where Y_{ji} is a jxn matrix of the measure of the centred variable *j* for country *i* in period *t*, X_{pi} is the pxj matrix of the value of the common factors for each country estimated, the coefficients A_{jp} are a matrix of jxp weights called factor loadings, representing weights attached to the explanatory variables and are in proportion of the cross-country variance of the variable that is explained by the factor, E_{ji} is jxn matrix of the unique factor and B_j is a vector of nx1 weights of the unique factor.

The estimated factor scores can be used to rank the countries according to the respective factors. In our case, the factor scores are used to rank the countries with respect to the efficiency and effectiveness of social spending, i.e. a relative measure of the member countries progress in social policy. The factor components are sorted according to the descending order of the Eigenvalue, which are equal to the variance of the components. Unlike in a traditional least squares estimation method case, where the vertical distance to the fitted line is minimized, here the sum of the squared residuals is measured as distances from the point to the first principal axis.

The method of principal component analysis was originated by Pearson (1901) and further developed by Hotelling (1933). The method of composite indices, as we already stated, has been employed in many areas including the computation of an environmental index (Kang, 2002), in the computation of a simple globalization index using trade and financial openness (Agénor, 2003), in computation of composite index of innovation system (Katz, 2006), in computation of technology assessment index (Arcelus, Sharma and Sirinivasan, 2005), in assessment of innovations (Nasierowski, 2007) and in evaluation of economic and social indicators of global competitiveness (Mirchandani, 1999), in analysis of world competitiveness (WCY, 2006), and others. Tausch, Heshmati and Oh (2007) and Heshmati and Oh (2007) used the method for the computation of the social policy indices.

As shown above, the composite indices are found useful in a variety of economic performance and social policy areas. Despite their attractiveness, they are subject to several methodological problems (Saisana and Tranatola, 2002; Nasierowski, 2007; Mirchandani, 2005; and Lockwood, 2004). These include the possibility of manipulation to produce desired outcomes, missing data, weighting and aggregation of indicators, producing similar ranking regardless of intensions of the computation exercise. Hair et al. (2006) provide a four step procedure to compute an index including: (i) to scan the anti-image correlation matrix, (ii) elimination of indicators based on the Kaiser-Meyer-Olin sample adequacy, (iii) conditions for extraction of indicators with desirable properties, and guidance for interpretation of the results. In this paper by using a parametric approach we are able to avoid several of the problems mentioned above.

9. THE FACTOR ANALYSIS RESULTS

Result from factor analysis based on the ECOFIN data is reported in Table 10. Four types of social policy model including direct action against social exclusion (Denmark and Ireland), emphasis on health and family social expenditures (Estonia and Ireland), Neo-liberal approach (Netherlands and Romania) and Unemployment benefit centred approach (Belgium and Spain) are distinguished. The factor loadings values of a set of social policy indicators and their contributions to each type pf social policy model are also reported.

Table 10: A factor analysis of the ECOFIN data

		Type 1: DK IRE, direct action against social exclusion	Type 2: EST, IRE, health and family soc expenditures	Type 3: NL, RO neo-liberal approach	Type 4: BE, SP, unemployment benefit centred approach
Family/Children % TB	VAR02	0,485	0,574	-0,319	-0,053
Health care/ Sickness and disability % TB	VAR03	0,099	0,859	0,27	-0,153
Housing and Social exclusion % TB	VAR04	0,785	-0,057	0,224	-0,256
Old age and survivors % of TB	VAR05	-0,615	-0,752	-0,097	-0,209
Unemployment % TB	VAR06	0,300	-0,062	0,068	0,889
General government contributions as % of financing of total social sec contributions	VAR07	0,615	-0,29	-0,688	-0,006
Employers' share	VAR08	-0,784	0,513	0,039	-0,014
Protected persons' share	VAR09	0,123	-0,256	0,752	0,215
Other sources	VAR10	0,516	-0,293	0,451	-0,363

Source: Our own calculations from ECFIN/E3(2007)/REP/50604 and Eurostat data. Calculated by SPSS XIV, implemented at Innsbruck University

These factors yielded the following empirical typology of welfare states in Europe shown in Table 11. The table guide us to the identification of countries with best practice social policy models, their types as well as their rank in relation to the remaining countries in the sample. The ratio of a country’s score to the best practice, not reported here, indicates the degree of efficiency in its welfare policy. The country with the highest score serves as frontier, reference or the benchmark model. The gap or distance to the frontier country also suggests potential for reduction in poverty by using the frontier country’s social policies.

Table 11: The empirical typology of welfare states in Europe

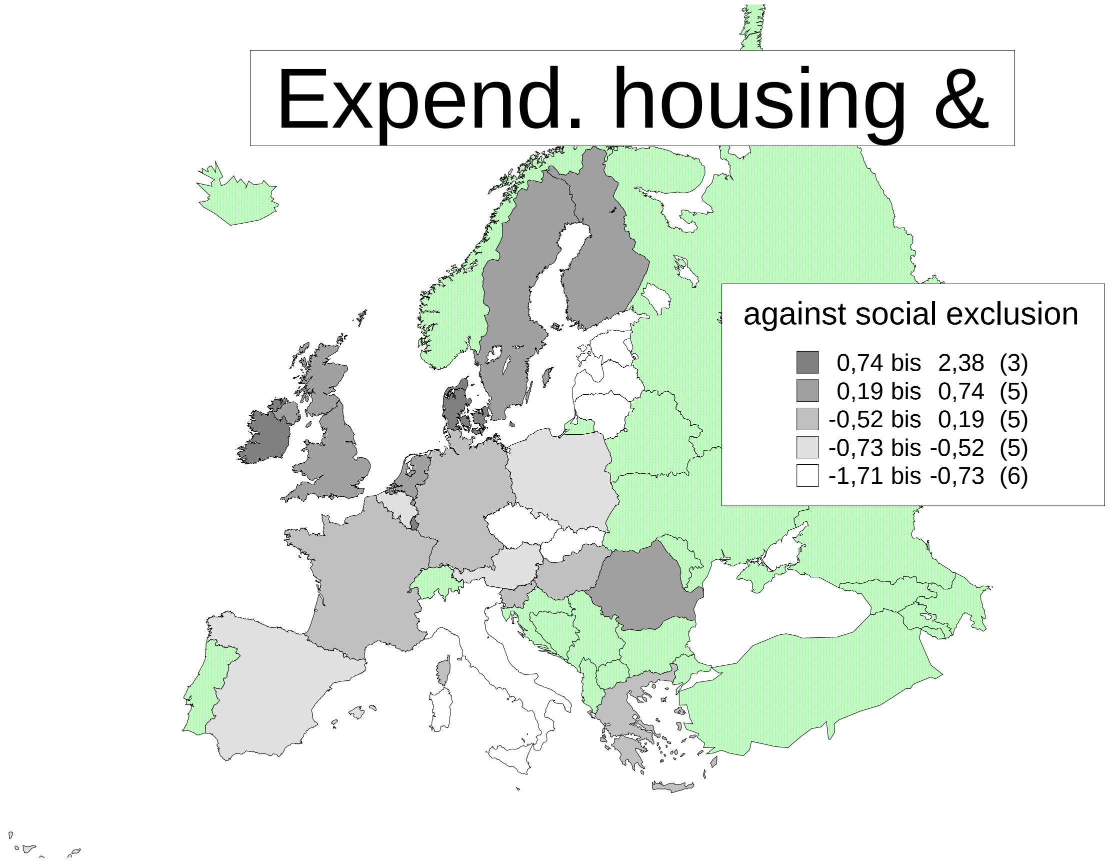
	Type 1: DK IRE, direct action against social exclusion	Type 2: EST, IRE, health and family soc expenditures	Type 3: NL, RO neo-liberal approach	Type 4: BE, SP, unemployment benefit centred approach
Austria	-0,5220	-0,4440	-0,1230	0,7264
Belgium	-0,6890	-0,0820	0,3331	2,4016
Cyprus	1,6257	-1,6020	-0,7600	-1,1840
Czech Republic	-0,7350	1,1610	1,1587	-0,2360
Denmark	2,3773	-0,5940	-0,9330	0,5151
EA13	-0,2740	-0,3500	0,1049	0,6284
Estonia	-1,7060	1,9824	-1,1200	-1,2020
EU25	-0,0440	-0,3240	-0,0500	0,2901
Finland	0,7351	0,6589	-0,6670	0,8623
France	0,0303	-0,0720	0,3550	0,5411
Germany	0,0925	-0,1560	0,0595	1,2889
Greece	0,1881	-1,4090	0,7957	-0,5070
Hungary	0,0812	0,6511	-0,1580	-1,0590
Ireland	2,1547	1,6106	-0,4920	0,1008
Italy	-1,6570	-1,5330	-1,0700	-0,7270
Latvia	-0,8850	-0,1150	-0,9100	-0,2980
Lithuania	-0,9350	0,5675	-1,2770	-1,1790
Luxembourg	1,0599	0,8831	-0,6320	0,0079
Malta	-0,6140	-0,9210	-0,0150	0,6446
Netherlands	0,6758	-0,3150	2,7985	-0,5590
Poland	-0,6250	-2,2030	0,1454	-0,8720
Romania	0,2034	0,9916	2,1827	-1,5230
Slovak Republic	-0,8170	1,0988	0,7932	0,3646
Slovenia	-0,0390	-0,0860	1,2184	-0,0410
Spain	-0,5670	0,1466	-0,0410	2,1732
Sweden	0,3479	0,6251	-1,1350	-0,0180
UK	0,5385	-0,1690	-0,5630	-1,1410

Source: Our own calculations from ECFIN/E3(2007)/REP/50604 and Eurostat data. Calculated by SPSS XIV, implemented at Innsbruck University

Model 1: Direct action against social exclusion

The Map 1 shows the rank of countries in respect with the Type 1 welfare model, namely, direct action against social exclusion, where Denmark and Ireland are the frontier countries. Here the expenditure on housing is the main indicator or social policy measure. The distribution of efficiency differs much across the countries.

Map 1: direct action against social exclusion



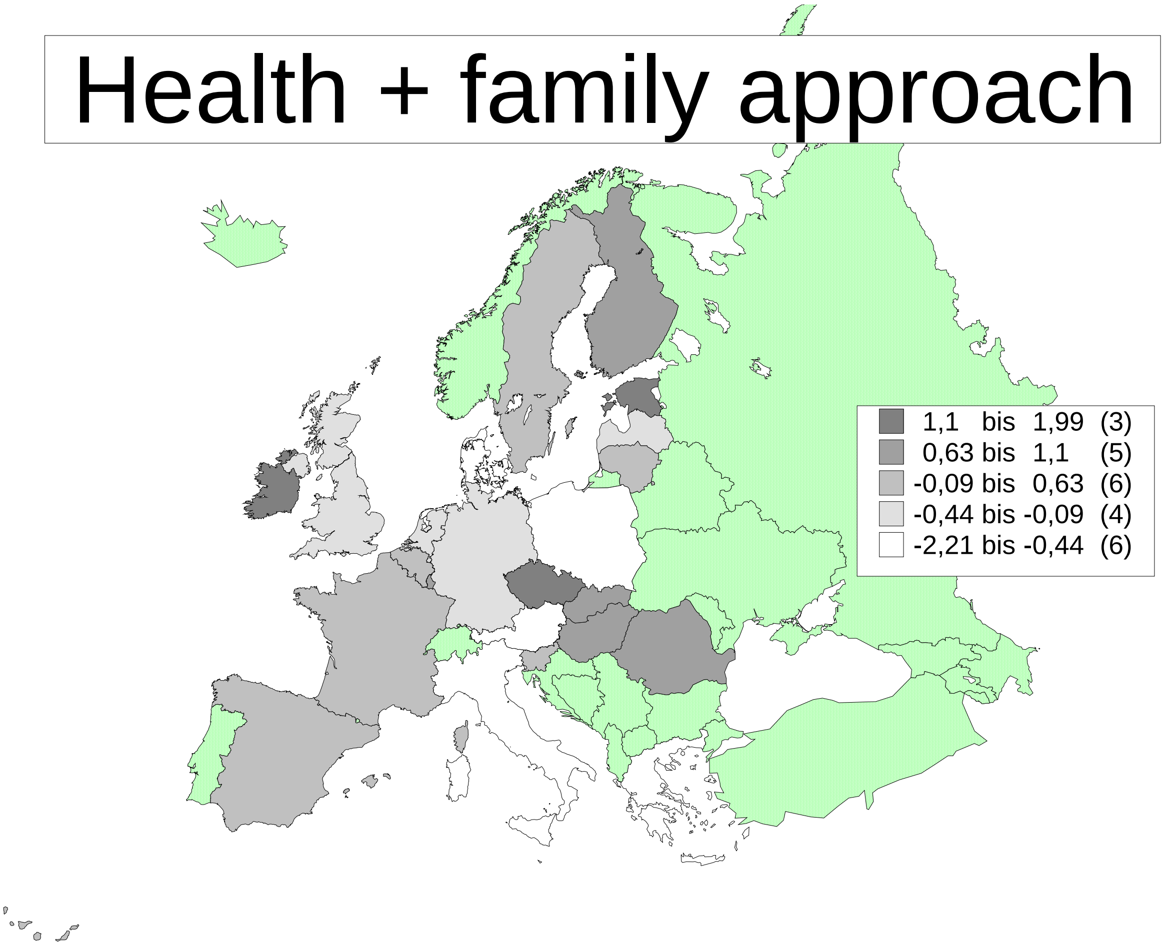
Legend: calculations see text. Green colour: no available data. Source: Our own calculations from ECFIN/E3(2007)/REP/50604 and Eurostat data. Calculated by SPSS XIV, implemented at Innsbruck University. "Bis" is shorthand for: ranging from … to. Based on Table 2 of this article

The factor analysis results related to welfare Model 1 are found in Table 10. The model combines very high expenditures on housing for the fight against social exclusion, and a very high government contribution towards the financing of the social policy model. The model has a very low share of employer's contribution in the financing of the model, and pension expenditures are a smaller part of total benefits. Most typically to be found is: Denmark and Ireland; least realization of the model: Baltic States, Czech Republic, Slovak Republic, Italy. Trade-off with the effectiveness of poverty reduction: significant.

Model 2: Health and family approach

The Map 2 shows the rank of countries in respect with the Type 2 welfare model, labelled as health and family approach, where Estonia and Ireland are serving as the frontier countries. Here the expenditure on health care, sickness and disability are the main indicators or social policy measures. The distribution of efficiency differs much across the countries.

Map 2: Health and family soc expenditures



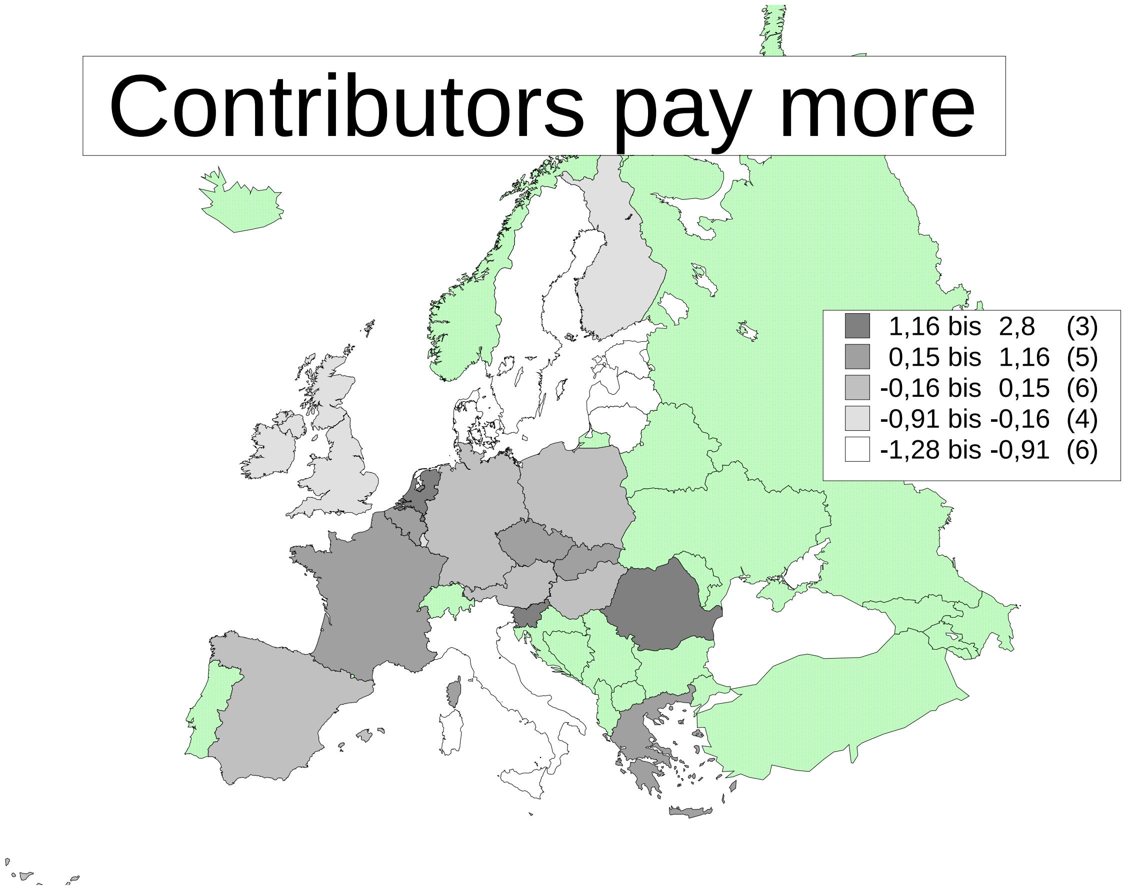
Legend: calculations see text. Green colour: no available data. Source: Our own calculations from ECFIN/E3(2007)/REP/50604 and Eurostat data. Calculated by SPSS XIV, implemented at Innsbruck University. "Bis" is shorthand for: ranging from … to. Based on Table 2 of this article

The factor analysis results related to welfare Model 2 are found in Table 10. The model combines very high expenditures on family and children, and on health, sickness and disability. Pension expenditures are a smaller part of total benefits. Most typically to be found: Estonia and Ireland; Czech Republic. Least to be found: Italy, Poland, Greece. Trade-off with the effectiveness of poverty reduction: not significant, but positive

Model 3: Neo-liberal approach

The Map 3 shows the rank of countries in respect with the Type 3 welfare model, called neo-liberal approach to welfare. Here Netherlands and Romania are identified as the frontier countries. The protected person's share or contributors pay more are the main indicators or social policy measures. The distribution of efficiency differs much across the countries and to the first 2 welfare models.

Map 3: Neo-liberal approach: contributors pay



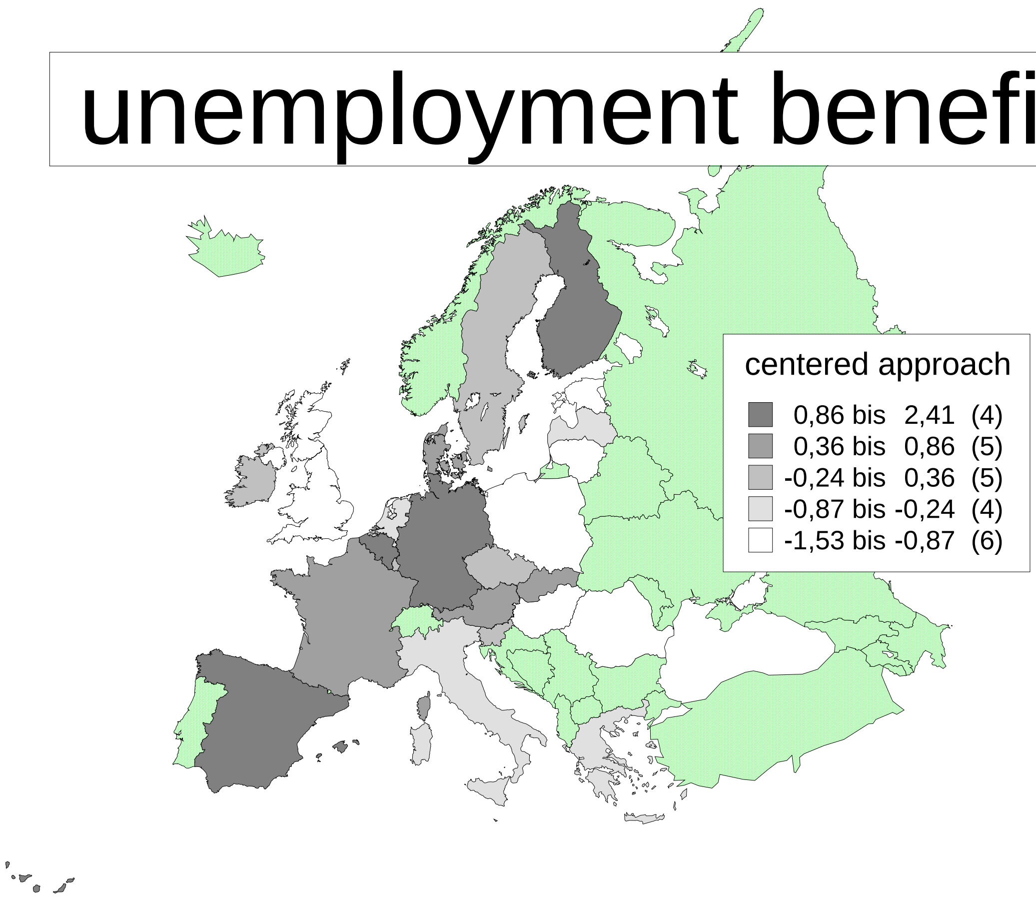
Legend: calculations see text. Green colour: no available data. Source: Our own calculations from ECFIN/E3 (2007)/REP/50604 and Eurostat data. Calculated by SPSS XIV, implemented at Innsbruck University. "Bis" is shorthand for: ranging from … to. Based on Table 2 of this article

The factor analysis results related to welfare Model 3 are found in Table 10. The Model 3 combines very high contributions by the insured persons and very low contributions by the state. Most typically to be found: Netherlands and Romania. Least to be found: Baltic States, Sweden, Italy. Trade-off with the effectiveness of poverty reduction: not significant, but positive

Model 4: Unemployment benefit centred approach

The Map 4 shows the rank of countries in respect with the Type 4 welfare model, called unemployment benefit centred approach to welfare. Belgium and Spain are identified as the frontier countries with best practiced welfare system. The unemployment benefit is the main indicator or social policy measure. The distribution of efficiency differs much across the countries and to the first 3 welfare models.

Map 4: unemployment benefit centred approach



Legend: calculations see text. Green colour: no available data. Source: our own calculations from ECFIN/E3 (2007)/REP/50604 and Eurostat data. Calculated by SPSS XIV, implemented at Innsbruck University. "Bis" is shorthand for: ranging from … to. Based on Table 2 of this article

The factor analysis results related to welfare Model 4 are found in Table 10. The model is based on a very high share of unemployment benefits per total benefits. Most typically to be found: Spain and Belgium, Germany and Finland. Least to be found: UK, Poland, Lithuania, Estonia, Hungary, Romania. Trade-off with the effectiveness of poverty reduction: significant and positive.

We also applied standard multiple regression analysis to analyze the effects of the four types of social expenditure and social welfare regimes in Europe on poverty reduction, as defined in Table 2. The multiple regression results are reported in Table 12.

Table 12: Multiple regression with the efficiency of poverty reduction

Predictor	Empirical measurement see Table 9	Unstandardized regression coefficient	Standard error of the estimate	Beta weight	T-value	Error probability
Type 1: DK IRE, direct action against social exclusion	REGR factor score 1 for analysis 1	1,245	0,6	0,362	2,074	0,05
Type 2: EST, IRE, health and family soc expenditures	REGR factor score 2 for analysis 1	0,800	0,6	0,233	1,333	0,196
Type 3: NL, RO neo-liberal approach	REGR factor score 3 for analysis 1	0,729	0,6	0,212	1,215	0,237
Type 4: BE, SP, unemployment benefit centred approach	REGR factor score 4 for analysis 1	1,089	0,6	0,317	1,814	0,083

Source: Our own calculations from ECFIN/E3(2007)/REP/50604 and Eurostat data. Calculated by SPSS XIV, implemented at Innsbruck University. Adjusted R^2 = 0,208; F = 2,711; error probability of the entire equation = 5.6%, df = 26

Our regression results indicate the significant positive effects of Model 1 and Model 4 on poverty reduction. This suggests that action against social exclusion and unemployment benefits are most effective measures in poverty reduction.

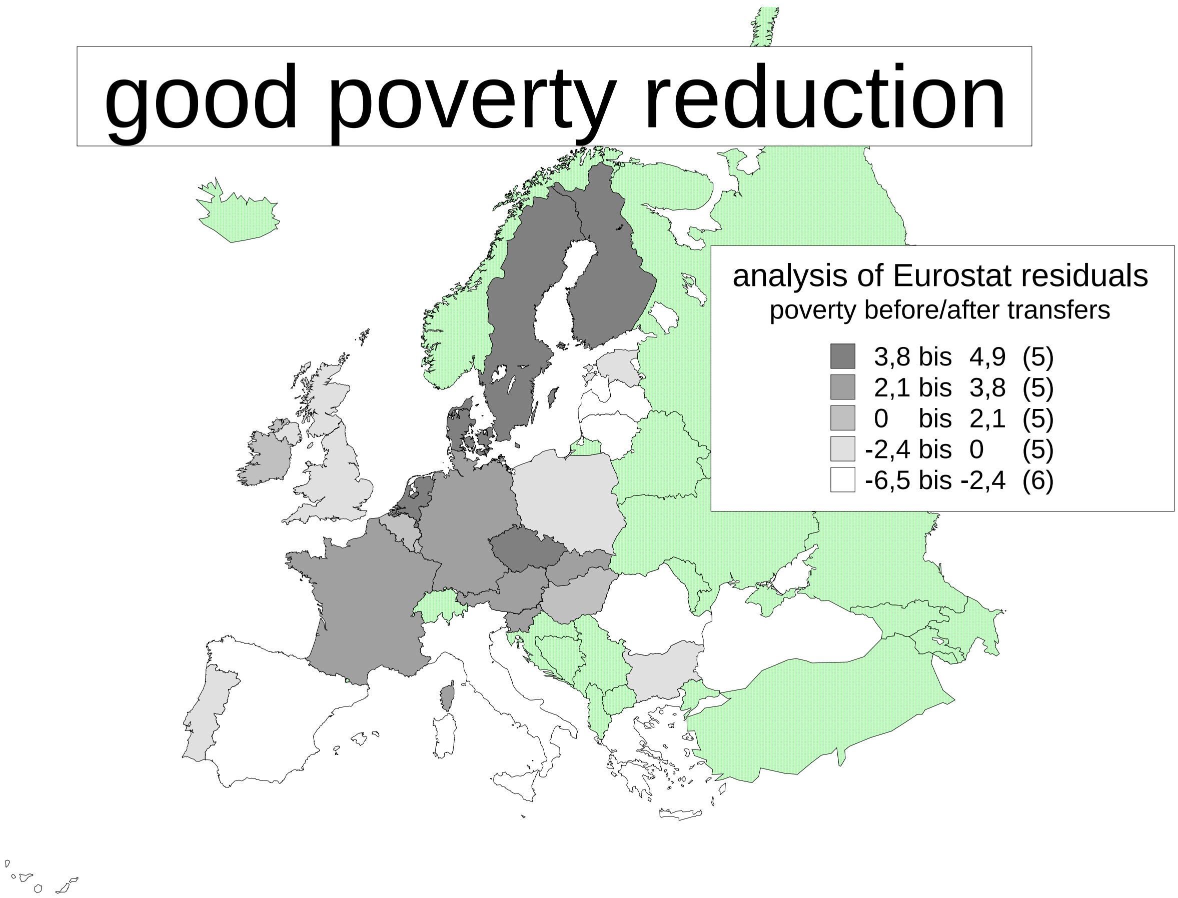
10. CONCLUSIONS

The neo-liberal agenda, emerging from the recent European Commission ECOFIN paper, which we discussed at length in this essay, maintains that EU-27 governments should, *inter alia*:

- Redirect rather than increase public expenditures.
- Make revisions in the pension systems and in the unemployment benefit schemes, which should be implemented in parallel.
- Governments should be encouraging people to work longer and be more active in order to cope with the social, economic, fiscal and other challenges posed by ageing populations.
- "Making work pay" through appropriate incentives so that tax/benefit systems do not hinder labour market dynamics and actually it help to facilitate structural changes.
- Governments should be pursuing further the ongoing efforts to improve cost-effectiveness and long term financial sustainability of health care
- Governments should evaluate and screen regularly the efficiency of social policies, with a strong emphasis on value for money.

For Aiginger (2008), by contrast, the European model is no barrier to competitiveness, if it is reformed in the direction of fostering change and growth, improving incentives and qualifications. The Scandinavian countries, which now combine rapid growth, full employment with a comprehensive welfare system and a high priority for ecological concerns and fairness, show the way. While for Aiginger and associates (2007) the differences with regard to growth dynamics had been very small in the decades after World War II (1960-1990), growth rates as well as the employment and social policy records have diverged over the past 15 years. The best performances are: the Scandinavian model and the liberal Anglo-Saxon model, while the continental model produced low growth and increasing unemployment. The reforms primarily in the Scandinavian countries allow Aiginger and associates to delineate elements of a "New Welfare State Architecture" which on the one hand upholds important characteristics of a European social model, but on the other hand allows welfare states to be competitive in the globalising economy. For Tausch, Heshmati, Balajan (2007) the fourteen "kernel Lisbon indicators" go indeed hand in hand with high comparative price levels; high freight transport; high greenhouse gas emissions; low business investment rates; and low youth educational attainment rates. The authors conclude that in reality we are facing four underlying and contradictory processes including: a Lisbon productivity factor; high eco-social exclusion; the employment performance; and the neo-liberal European model.

Map 5: Good/bad poverty reduction policies in Europe



Legend: calculations see text. Green colour: no available data. Our own calculations from ECFIN/E3 (2007)/REP/50604 and Eurostat data. Computer Software Microsoft EXCEL 2000 and 2003. "Bis" is shorthand for: ranging from … to. Based on Table 2 of this article

The evidence, surveyed in this article, suggests that in terms of the efficiency of the European social model there is the following geography (Map 5) of comparative European performance in place, which again underlines the importance of the Aiginger analysis about the importance of the "model Scandinavia":

Applying rigorous state-of-the-art cross-national comparative social science methodology, we also arrive at the conclusion that in terms of the initial ECOFIN definition of efficiency, the data presented in this article suggest that apart from Finland and the Netherlands, three new EU-27 member countries, the Czech Republic and Slovenia[17], provide interesting answers to the old and troubling question about the "bang" and the "buck"[18] (see Map 6).

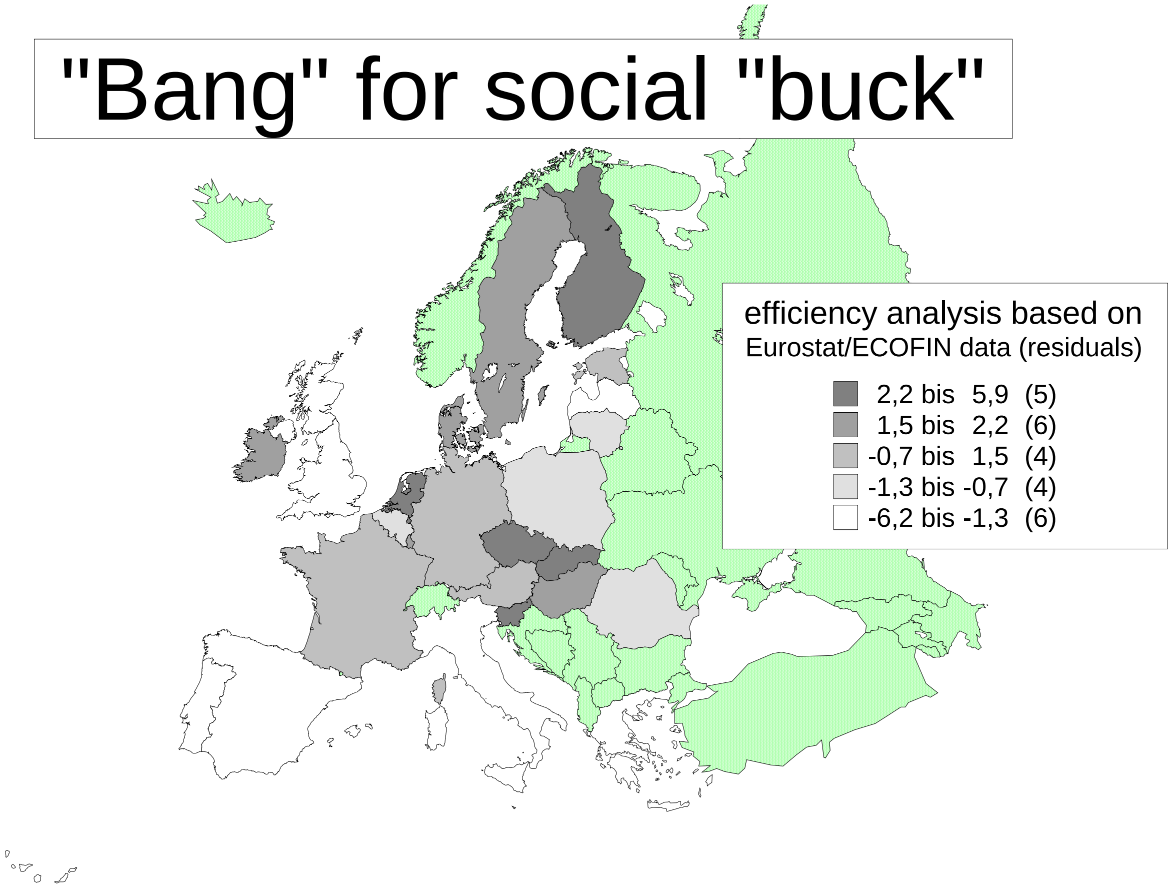
Italy, Spain and Greece in each case are among the worst performing countries in Europe. The mediocre performance of the often hailed best practice model of the United Kingdom[19] on all accounts of this study should be also taken into account:

[17] The point about the depth of Roma poverty in the East and Muslim poverty in the West, made by Clesse in his article (2008) must again be underlined: we have reason to think that standard Eurostat poverty indicators do not capture sufficiently the extent of poverty, especially Roma poverty, in many new member countries of the EU-27, and Muslim *"banlieue"*-poverty in the old EU-27 member countries. A more adequate indicator would be UNDP data series on the percentage of people not surviving age 65. Here, especially, the often hailed social policies of the United Kingdom have to be put into a relative perspective: female probability at birth of surviving to age 65 is just rank 29 in world society (global leaders are Japan, Hongkong, Spain, Switzerland, Italy, Iceland, Israel, Sweden, Cyprus and Australia), and Slovakia is rank 40; Bulgaria 50 and Romania rank 59 of all countries of the world. Male probability at birth of surviving to age 65 in the UK is just rank 21 in world society, (global leaders are Iceland, Sweden, Hongkong, Australia, Japan, Switzerland, Cyprus, Malta, Israel, and United Arab Emirates). The depth and tragedy of Roma poverty again is reflected in these figures: Slovakia is rank 75; Bulgaria 76 and Romania rank 86 of all countries of the world.

[18] In the Cold War, this terminology was applied to the military gains from the continued nuclear arms race. In June 1998, the Brookings Institution, a Washington-based think tank, published "Atomic Audit: The Costs and Consequences of U.S. Nuclear Weapons Since 1940." According to "Atomic Audit," since 1940 the United States has spent at least $5,481,083,000,000 -- that's nearly $5.5 trillion -- in constant 1996 dollars on its nuclear weapons and weapons-related programs. The figure does not include an estimated $320 billion for future and some present costs for the storage and disposal of nuclear wastes and weapons. Distributed evenly to everyone in the United States, the cost of nuclear weapons comes to $21,646 per person. Represented as a brick of new $1 bills (such as the type available in banks, with $200 per inch), the stack of bills spent for nuclear weapons would stretch to the moon and nearly back to Earth. Laid end-to-end, those bricks of $1 bills would encircle the Earth at the equator more than 100 times, building a wall nearly nine feet high. Stephen Schwartz, the director of the U.S. Nuclear Weapons Cost Study Project, notes that the United States still spends about $35 billion each year -- more than $96 million a day -- on its nuclear arsenal and related programs. He cites as an example an effort by the U.S. Air Force and Atomic Energy Commission, between 1946 and 1961, to create a nuclear-powered aircraft. According to "Atomic Audit," the failed program cost more than $7 billion before it was cancelled by President Kennedy. "You want to make sure you really are getting a bigger bang for the buck," says Schwartz. "As a result of our work, we found a lot of programs that contributed absolutely nothing to the effort." (see http://www.cnn.com/SPECIALS/cold.war/experience/the.bomb/atomic.audit/).

[19] For a forceful critique of the neo-liberal vision of Europe see also Clesse, 2008.

Map 6: The social “bang” for the social expenditure “buck”



Legend: calculations see text. Green colour: no available data. Our own calculations from ECFIN/E3 (2007)/REP/50604 and Eurostat data. Computer Software Microsoft EXCEL 2000 and 2003. “Bis” is shorthand for: ranging from … to. Based on Table 6 of this article.

We also could show in this paper, that the direct action against social exclusion, as best evidenced by the cases of Denmark and Ireland, combines very high expenditures on housing and for the fight against social exclusion, and a very high government contribution towards the financing of the social policy model. The model has a very low share of employer’s contribution in the financing of the model, and pension expenditures are a smaller part of total benefits. The trade-off with the effectiveness of poverty reduction is significant.

Health and family social expenditures, typically present in Estonia and Ireland, combine very high expenditures on family and children, and on health, sickness and disability. Pension expenditures are a smaller part of total benefits. The trade-off with the effectiveness of poverty reduction is not significant, but positive.

The neo-liberal approach, which means in effect that contributors, not the governments pay for the social system, is well present today in the Netherlands and in Romania. The model combines very high contributions by the insured persons and very low contributions by the state. The trade-off with the effectiveness of poverty reduction: is not significant, but positive.

There is a fourth model being practiced in Europe – it is the unemployment benefit centred approach. Belgium and Spain are the model countries. The model is based on a very high share of unemployment benefits per total benefits. The trade-off with the effectiveness of poverty reduction is significant at the 10% error level and positive.

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