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Globalisation, European Integration and Social  
Protection – Patterns of Change or Continuity?

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## Editors

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# Globalisation, European Integration and Social Protection – Patterns of Change or Continuity? \*

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## Abstract

The adoption of a new instrument of governance in the EU – the open-method-of-coordination – has renewed the notion of convergence/divergence across EU member states. This paper examines the role of European integration in shaping and changing social welfare systems and investigates whether these patterns of change or continuity follow welfare state regime typologies. Embedded in the Europeanisation, convergence and welfare state regime literature, we rely on recent 2007 OECD social expenditure data. Controlled for cyclical and demographic effects this study shows that since 1991 social expenditures of EU member states have converged and increased on average, whereas non-EU member states have diverged. To examine whether these trends can be explained by changes in welfare regimes dendograms offer a useful means. Although we find a link between the type of regime and the long-term type trajectory more generally, these regime patterns appear to be in flow. This study finds in particular some empirical evidence for the loss in momentum of the Scandinavian regime pattern.

**JEL-codes:** F15, H53, H55, O52, O57

**Keywords:** social expenditures, convergence, Europeanisation, welfare state regimes, cluster analysis

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## 1. Introduction

In light of the new modes of governance debate, the open method of coordination (OMC) has renewed the discussions around convergence patterns across EU member states. This relatively new (EES, 1997), 'soft' and intergovernmental means of EU governance is based on voluntary cooperation of its member states. OMC benchmarking, by now, covers a broad EU policy spectrum - from development to education - and is expected to facilitate the achievement of the overall goals and objectives of the 2000 Lisbon strategy. In the field of social policy, more specifically, benchmarking has enhanced the debates on social indicators which have become 'not only explanatory instruments in the evolution of societies but also instruments of evaluation of social policies in different countries' (Bouget, 2003: 675).

The added value of this study is two-fold, empirical and methodological. From a methodological point of view, this study contributes to recent efforts in the field to improve measurements of changes in social expenditures in cross-national perspective, which in this respect also contributes to the extensive body of the retrenchment literature (Starke, 2006: 16). By controlling social expenditures for cyclical and demographic factors, we try to separate the effects of parallel but independent domestic developments from globalisation and Europeanisation effects. Furthermore, we combine a set of tools to account for the overall question of how EU countries have adjusted their social welfare spending to the economy in a globalised world. Last but not least, it is the selection of states which controls for the effect of European integration more specifically. Whether it is EC initiatives or a simple answer to an ever globalised world economy (,i.e. increased global connectivity and integration in the economic, political and social spheres), the selection of EU and non-EU member states facilitates the study's interpretation (Haverland, 2006). Herewith it represents another contribution to the steadily growing, methodological sensitive, Europeanisation literature.

From an empirical point of view, this study assesses convergence patterns of social expenditures quantitatively at the macroeconomic level. Proposing a new social indicator which measures convergence/divergence of social expenditures in EU/OECD countries will control for the particular effects of European integration on convergence of social expenditures from a cross-national perspective. These data illustrate that social expenditures in mature welfare states have converged over the last 20 years. However, the degree of convergence has been more pronounced in EU member states, than across other OECD countries. Interestingly, however, is that there is no evidence for a 'race to the bottom', neither for EU member states, nor for the remaining OECD countries. The average numbers for EU member states illustrate a constant trend over the last 13 years, while the remaining OECD countries have continuously increased their social security spending. Remaining on a relatively high level of social security expenditures, the effect of European integration on national welfare states, however, seems weak/limited.

These empirical results also support the idea (Bouget, 2003) of 'adjustment' reforms rather than radical changes in transitional period. In line with the path dependency hypothesis the data suggest that political choices are determined by earlier choices due to 'increasing returns' (Pierson, 2000). Political decisions on reform initiatives seem to be dependent on past choices. Accordingly, with regard to the convergence of welfare state regimes we would expect them to be resilient.

This long-term convergence patterns of social welfare systems leads us to the subsequent question of whether there is a link between the regimes of social protection and the different trajectories. Validating existing typologies of welfare regimes large-scale research projects have found clear variation of welfare reform processes within regime types (Ferreira and Rhodes, 2000; Scharpf and Schmidt, 2000). In addition, if member states are converging towards one European social model, the individual welfare regime types will not exist any longer. This supplementary analysis of national trajectories of social expenditure, however, does find a relationship between regime types and the degree of welfare state change across mature welfare states. In line with recent large-n studies (Bouget, 2003; Kühner, 2007) this paper provides empirical evidence for the mostly qualitative 'regime dependence' literature which have found path-dependent changes in key areas of social policy (Bonoli and Palier, 2000; Myles and Pierson, 2001); the extent of retrenchment possible depends on the specific institutional configurations of political systems and the path dependence of existing welfare state structures (Starke, 2006: 104). The stability of regimes suggests that current choices closely depend on past choices (path dependency), a fact that fails to point towards convergence for the future. On the other hand, more recent data are less straight-forward. Regime patterns seem to have lost importance recently. Whereas the Continental and Mediterranean regime have apparently retained, the Scandinavian model has dissolved.

The paper will be structured as follows. After a critical assessment of the existing Europeanisation, convergence and regime literature we present the underlying research design. Here we focus on the selected data and its shortcomings and the methods applied to assess convergence patterns across EU and non-EU countries to account for the effect of European integration on national welfare state regimes. The paper then uses cluster analysis to build upon previous research and resurrects the concept of welfare states regime patterns. In contrast to existing work, the analysis finds specific patterns of welfare state regimes. The typology differs from existing models, although some countries emerge as regime ideal types. The article concludes by reflecting on the broader implications of its analysis, for national welfare spending and future research in this field.

## 2. Literature Review

*Understanding Europeanisation of national social policies in two ways:*

Understanding Europeanisation (the effect of European integration on member states) through its instrumentalisation has resulted in a rich scholarly field of research (e.g. Green Cowles, Caporaso and Risse, 2001; Featherstone and Radaelli, 2003; Graziano and Vink, 2007) covering different policy areas and research designs. In the field of social policy, Europeanisation of national social security entails direct and indirect effects (Leibfried, 2000: 47; Falkner, 2007: 259). Direct effects refer to the implementation of EU social policies, while indirect effects refer to the impact of the creation of a single market on national social policies.

Although social progress has been an EU objective since the Treaty of Rome in 1957, it is only from the end of the 1990s that with launching terms as "convergence strategy" and "common objectives" social security has become a significant EU policy area (Malier e.a., 2007). In 2000 the European Council adopted the goal that besides economic growth also social cohesion should be strengthened in the EU. The open

method of coordination (OMC) was introduced 'as the means of spreading best practice and achieving greater convergence towards the main EU goals.<sup>1</sup> Taking the differences of the European welfare states into account, the OMC is a set of non-binding instruments, like the adoption of guidelines, indicators, recommendations and national action plans.<sup>2</sup> Because of the 'open' character of the OMC, it is still an empirical question whether this method leads to convergence of national social security systems. Until now, only qualitative studies have addressed this question (De la Porte and Pochet, 2002; Zeitlin and Pochet, 2005).

Indirect effects of European integration on national social security systems refer to effects of economic integration. We can distinguish three of these effects. First, European integration leads to increasing mobility of production factors. Migration of employees might be harmful when it is triggered by differences in generosity of welfare systems. The country with relative high social benefits and therefore a high tax burden stimulates net payers to go abroad and net receivers from abroad to move into the country. This adverse selection problem puts pressure on the generosity of social security systems, because the social expenditures rise and the tax base narrows. In the end, this results in convergence to lower social protection levels (Sinn, 1990; Sinn, 2002). Second, increased international competition forces governments to reduce their social standards to offer attractive, competitive conditions for companies in order to keep them inside the borders and to maintain employment. Consequently, governments compete leading to lower standards of social policies, the so-called 'social race to the bottom' or 'social dumping' (Scharpf, 1999). This effect could even be strengthened by the fact that because of the EMU criteria, countries can only increase their competitiveness with supply-side strategies (Scharpf, 2002: 649). In contrary to these two first effects, a third indirect effect of European integration could lead to increasing spending on social protection. To insure themselves against the increased dynamics of the labour market due to international economic integration, people desire higher levels of social protection (Agell, 1999: 154). And economic growth stimulated by European integration - as a consequence of the elimination of transaction costs, more price transparency, and a better investment climate as a consequence of less uncertainty regarding prices and growth (Van Marrewijk, 2007: 621-625) - enables financing more generous social security systems (Cornelisse and Goudswaard, 2002: 5).

#### *Convergence – a contentious debate:*

Generally, convergence can be understood as a decrease in variation of policies across countries over time. In fact, different aspects of policies can converge. In general, economists are mainly interested in the convergence of policy outcomes, like unemployment rates, which can be either the results of economic processes or public policies (Unger and Van Waarden, 1995). Policy analysts, by contrast, analyse the convergence of policy outputs, which are the policy programs adopted by governments, with which policy makers attempt to influence society and economy (Unger and Van Waarden, 1995: 10;

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<sup>1</sup> Lisbon European Council 23 and 24 March 2000, Presidency Conclusions, paragraph 37.

<sup>2</sup> Since eventual OMC related policy changes at the national level are the result of mechanisms as learning and peer pressure, rather than of the implementation of EU law, effects of the OMC could also be categorised as indirect effects of European integration (Vink and Graziano, 2007: 10).

Holzinger and Knill, 2005: 776).<sup>3</sup> Welfare state scholars, represented by economists as well as policy analysts, typically focus on convergence of expenditures on welfare state programs, which can be considered as policy inputs (Hill and Hupe, 2002: 9). However, since social expenditures also give an indication of the generosity of social security systems, others may regard social expenditures as policy outputs.

In most of the convergence research in the field of social policy, decreases in variances across countries are explained by international factors. Economic integration, often referred to as globalisation or European integration, EU social policies and more indirect influences of other international organisations such as the OECD, the International Monetary Fund and the Worldbank may all lead to convergence of social policies. However, Bennett (1991: 231) reminds us that before attributing convergence to trans-national factors, the impact of domestic factors have to be analysed first. After all, convergence of policies between countries may occur as a result of equivalent but independent reactions of political actors to parallel problem pressures (Holzinger and Knill, 2005: 786).

With regard to social security policies, there are several developments within societies and populations that put welfare states under pressure (Jaeger and Kvist, 2003). Van Kersbergen and Verbeek (1997: 20) mention the following pressures: ageing population, traditional family patterns do not longer exist, stable employment patterns and trajectories are challenged, changing relations between men and women, weakened positions of organized labour movements, and the political trend to roll back the welfare state. Taylor-Gooby (2004) describes the first two of these tendencies as 'new risks'. He defines them as (p.2) 'the risks that people now face in the course of their lives as a result of the economic and social changes associated with the transition to a post-industrial society'. In comparison with old risks, the new ones are more manageable for individuals and also it is more important to manage these new risks.<sup>4</sup>

Over the past decades the attention for analysing convergence of social expenditures has grown steadily. Early scholars as Wilensky (1975) show that from the 1950's social expenditures have grown in rich countries. The hypothesis is that due to similar developments as industrialisation and economic growth public expenditures on welfare of modern societies will converge. Montanari (2001: 470) called this the 'old convergence' hypothesis. O'Connor's (1988) study, however, does not confirm this old convergence hypothesis empirically. She concludes that there is minimal convergence in social transfers and social expenditures among 17 countries in the period 1960-1980. When she breaks up this period to identify the effect of the oil crisis, she finds a slight convergence between 1960 and 1973 and a slight divergence between 1973 and 1980 in both indicators.

From the mid 1990's, the central argument is that globalisation and Europeanisation lead to a downward convergence of social expenditures. This argument is what Montanari (2001: 470) called the 'new convergence' hypothesis. Empirically, scholars found no evidence supporting this hypothesis. Greve (1996) assesses the impact of European integration on social policies and he finds upward convergence of the expenditures on social protection in 12 EU countries in the period 1980-1993. Cornelisse and Goudswaard (2002) find not only an upward convergence in social benefit expenditures, but also in

<sup>3</sup> Analyses on policy output convergence concentrate on many different dimensions, like policy goals, policy contents, policy instruments and policy styles (also called administrative convergence) (Bennett, 1991; Pollitt, 2001).

<sup>4</sup> Giddens (2007) speaks more generally about lifestyle changes.

gross replacement rates of unemployment benefits. Their study shows that EU countries as well as non-EU countries converged between 1960 and 1980, but that between 1980 and 1999 only the EU countries converged. Also Goudswaard and Caminada (2006) find a strong upward convergence in European social spending and gross replacement rates of unemployment benefits. However, the authors argue that it is too early to attribute the convergence in social expenditures to European integration, as a part of the convergence was only caused by a rise in the average value of the social expenditures.

Another, but very closely related, strand of literature tries to link convergence patterns to welfare state regimes. Bouget (2003) found that the behaviour of countries which are classified as liberal, social-democratic, Scandinavian or continental does not differ more between regimes than within regimes. Furthermore it is concluded that the convergent trend of social expenditures has not distorted the distinction between the regimes in the period 1980-1998. Castles (2004: 37) found for social expenditures, controlled for ageing and unemployment an increasing mean in only the Southern countries in the period 1980-1998. Whereas for the not controlled social expenditures he found increasing means for all regime types. Adelantado and Calderón Cuevas (2006) found that European welfare states are converging towards the middle in terms of public expenditure, social protection expenditure, income inequality and the risk of poverty. But in contrast to the findings of Bouget and Castles, Adelantado and Calderón Cuevas explain this convergence by accelerated increasing expenditures in those countries that had spent the least (Mediterranean and liberal welfare states), a slowed down expansion in those countries that had spent the most (social democratic welfare states) and a constant pattern in continental welfare states (p.377).

All in all, although many qualitative guided researchers favour arguments that show continuing national diversity (Pierson, 2001a; Taylor-Gooby, 2001; Daguerre and Taylor-Gooby, 2004; Hvinden, 2004; Martinsen, 2005), the overall result of quantitative studies seems to be that there is convergence in social expenditures across European countries over the last 25 years. Although Adelantado and Calderón Cuevas (2006) found that real social protection expenditures, measured in purchasing power parities per capita, have fallen, most scholars found increases in social expenditures and other social indicators. This means that there is hardly any empirical support for the hypothesis of a social race to the bottom. Actually, there is convergence to the top. Nevertheless, it is indistinct to what extent this convergence can be attributed to any European influences, because domestic and global dynamics have not been taken into account by most scholars. Furthermore, the existing work is not conclusive in the discussion to what extent patterns of social expenditures can be linked to welfare state regimes.

#### *Regime patterns - a never ending story*

The welfare state regime literature is rich and still growing (see Arts and Gelissen, 2006 for an extensive overview). The reference work by Esping-Andersen (1990) identifies three worlds of welfare capitalism. Based on an analysis of the arrangements between the market, the state and the family he classified countries into three types of institutional arrangements, 'each to reconcile economic development with measures to protect citizens against the risks of the marketplace' (Saint-Arnaud and Bernard, 2007: 504), namely conservative, liberal and social-democratic regime. Over the years, scholars have added supplementary regime types to the typology or shifted member states from one regime to the other. Leibfried (1992), Ferrera (1996) and Bonoli (1997), for example,

added a fourth group, the Southern regime. More recently, Sapir (2006) identifies four European social models, Nordic countries (Denmark, Finland and Sweden, plus the Netherlands), Anglo-Saxon countries (Ireland and the United Kingdom), Continental countries (Austria, Belgium, France, Germany and Luxembourg), and the Mediterranean countries (Greece, Italy, Portugal and Spain). Here, the Netherlands is part of the Nordic/Scandinavian regime pattern.

It is worth mentioning that these patterns have been disapproved and fiercely defended at the same time. Interestingly this turf war has been fought along the lines of methodology- a qualitative/quantitative research design divide. The determination of the welfare state types 'has been based primarily on the qualitative study of the main public policies governing social security' (Saint-Arnaud and Bernard, 2003). Large-n studies have not found any proof of them. Validating existing typologies of welfare reform processes, large scale research projects have found clear variation within regime typologies. Only recently, large-n empirical evidence has emerged supporting the welfare state regime typologies (Bouget, 2003; Kühner, 2007). Although the differences across the welfare regimes are often used to argue against one European social model, very few scholars pay attention to the question to what extent European integration affects the existence of the different welfare regimes.

### **3. Research Design**

#### *Dependent variable*

Existing scholarly work depends on a variety of dependent variables accounting for changes in social protection policies and welfare state regimes. Most scholars use or at least start with total expenditures on social protection, other aggregate expenditure measures (Castles, 2002; Castles and Obinger, 2007) or total social expenditures expressed per capita of population (Alsasua, Bilbao-Ubillos, Olaskoaga, 2007). But also more policy specific variables as coverage rates of social insurance programmes (Montanari, 2001) or replacement rates are used (Cornelisse and Goudswaard, 2002; Goudswaard and Caminada, 2006; Montanari, 2001). This study's dependent variable is the level of public social expenditures as a percentage of GDP, which gives an indication of the financial efforts of social provision<sup>5</sup>. The merits and demerits of this indicator will be discussed below.

#### *Data*

To assess the appearance of convergence patterns, this study extracts data from the most recent OECD Social Expenditure Database 2007. This database contains aggregated and disaggregated social expenditures of EU member states as well as of non-EU countries, for the years 1985 up till 2003. Therefore it is a feasible database for this study. In

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<sup>5</sup> These expenditures include the following nine social policy areas: old-age (i.e. pensions), survivors (i.e. pensions and funeral payments), incapacity-related benefits (i.e. disability benefits), health care, family (i.e. child allowances), active labour market policies (i.e. employment services, labour market training, subsidised employment), unemployment (i.e. unemployment compensation, early retirement for labour market reasons), housing (i.e. housing allowances and rent subsidies), other social policy areas (i.e. social assistance, food subsidies).

addition, the study relies on data from the World Bank World Development Indicators, the OECD Labour Force Survey and the OECD Tax-Benefit Models.

### *Methods*

Kühner (2007:15) gives an overview of the limitations of measuring welfare reforms by social expenditures. The main problem of convergence measures based on social expenditures is 'what is really measured'.<sup>6</sup> Changes in expenditure ratio's may not be caused by policy changes, but simply by the number of beneficiaries as a result of an ageing population or changes in unemployment levels due to cyclical factors. Social expenditure changes may not be determined by changes in policies, but by changes in demand for benefits.

To control for these changes in demands, social expenditure ratio's are divided by the unemployment rate<sup>7</sup> plus the percentage of people aged 65 and older<sup>8</sup> (Clayton and Pontusson, 1998; Castles, 2004). Although it is the trend in the resulting social expenditure ratio's rather than their absolute level, which is relevant here, the resulting ratio's give 'a crude measure of welfare generosity, theoretically to be interpreted as the percentage of GDP received in welfare spending for every 1 per cent of the population in need' (Castles, 2004: 36). An obvious deficiency of this indicator is that it implies that only two groups of welfare recipients receive all the social expenditures (Castles, 2004: 36). The reason we select the unemployment rate and the percentage of the population aged 65 and older to control for, and not another group of welfare recipients, for instance the number disabled persons, is that we intend to control for cyclical and demographic trends which might cause convergence patterns in social expenditures. Probably, there is no such trend in the number of disabled people. The changing family structure (Taylor-Gooby, 2004; Giddens, 2007), to the contrary, is such a trend. But due to a lack of data, for example the percentage of children living in single-parent families (Castles, 2004: 36), we are not allowed to control for this trend.

Because the data is controlled for cyclical and demographic effects, it is a bit more plausible that patterns of convergence or divergence can be attributed to policy changes which are influenced by processes of globalisation or Europeanisation. Though, also this method has its limitations. For instance, it is argued that the inclusion of demographic data instead of factual numbers of recipients of pensions and unemployment benefits, is problematic for controlling for the demand in benefits (Kühner, 2007: 15). In this respect, demographic data do neither account for early retirement schemes nor for people aged 65 or older who do not take up their pensions. However, it can be counter-argued that using factual numbers of recipients of, for instance, pensions benefits is even more problematic, since it eliminates differences in generosity across welfare states in which we are interested. After all, the existence of early retirement schemes itself gives a certain indication of generosity.

Since a main problem in the Europeanisation literature is how to demonstrate that domestic changes have been caused by EU-level factors rather than global or domestic

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<sup>6</sup> In addition, the data do not account for the differences in tax treatment of social benefits across the countries. Furthermore, since the study takes only public social expenditures into account, total social expenditures of some countries with for example mainly private health-care systems might be skewed.

<sup>7</sup> The number of people unemployed as a percentage of the labour force.

<sup>8</sup> Population aged 65 and above as percentage of the total population.

dynamics this study controls for cyclical and demographic factors.<sup>9</sup> To indicate whether it is the EU-level rather than globalisation that has had any impact on the convergence of social expenditures, the set of 22 countries includes 15 EU member states<sup>10</sup> and 7 non-EU members. These non-EU countries control for the effects of globalisation.<sup>11</sup> As the EU member states, these non-EU countries are advanced societies and capitalist economies (Haverland, 2006: 141).

To assess developments of convergence or divergence the standard deviation and the coefficient of variation<sup>12</sup> are calculated for several years.<sup>13</sup> A decrease over time in these variation measures points out that there is convergence, while an increase indicates that the social expenditures diverged. Furthermore, the development of the mean signifies the direction of the convergence or divergence.

To examine whether trends of convergence or divergence can be explained by changes in welfare regimes, we, then, determine whether the countries enjoying similar levels of development may be classified using the Esping-Andersen-Leibfried-Bonoli-Ferrera typology. To classify welfare regimes based on a qualitative approach and multiple regression, several methods have been used to identify welfare states regimes empirically. Ragin (1994) uses qualitative comparative analysis based on Boolean algebra to analyse characteristics of pension systems across countries, while Wildeboer Schut e.a. (2001) use a non-linear principal component analysis to examine regime types. For obvious reasons, we used cluster analysis to find groups of welfare states empirically (Kangas, 1994; Gough, 2001; Obinger and Wagschal, 2001; Saint-Arnaud and Bernard, 2003; Powell and Barrientos, 2004; Vasconcelos Ferreira and Figueiredo, 2005).

<sup>9</sup> For instance, in an outstanding study on the impact of EU-level factors on domestic policies, Levi-Faur (2004) casts doubt on the extent to which the liberalisation of electricity and telecom sectors in West-European countries has been caused by Europeanisation. Levi-Faur argues that the liberalisation in these sectors may also have taken place without EU governance, because these sectors were also liberalised in 16 Latin American and 8 rich and democratic non-EU countries.

<sup>10</sup> Unfortunately, the new EU member states are not included because of a lack of data.

<sup>11</sup> It should be mentioned that the European non-EU countries Switzerland and Norway may also be influenced by European integration, for example via policy competition.

<sup>12</sup> Convergence effects can be identified and measured by decreasing variation in the relevant indicators (Martin and Simmons, 1998: 753). In the convergence literature four types of convergence can be distinguished (Heichel et al, 2005: 831-834). The first one,  $\sigma$ -convergence, is the most common type. Studies concerned with this type, analyse the decrease in variation of domestic policies. Because of its indication of 'growing together', it is a basic logic for studies measuring the similarity of policies. The second type,  $\beta$ -convergence, refers to situations when laggard countries come up with leader countries. It occurs for example when poor economies grow faster than rich ones. Over the years, several types of  $\beta$ -convergence have been developed and it is typically used by economists to study economic growth rates (Barro and Sala-i-Martin, 1992; Sala-i-Martin, 1996; Galor, 1996; Quah, 1996). Gamma-convergence occurs if country rankings on the subject of a certain policy change over time, as an indication of the mobility of countries. An interesting dimension is that  $\gamma$ -convergence can occur where other types of convergence do not change at all. It is possible that rankings change while variance does not decrease. According to the concept of  $\delta$ -convergence, the distance of policies towards an exemplary model, for instance a model encouraged by an international organization, has to decline. Often,  $\sigma$ -convergence and  $\delta$ -convergence go hand in hand. If policies of countries grow more and more towards the same model, variance between these countries will be reduced. However, it is not necessary that these two convergence types occur simultaneously. When policies advance a model with the same speed, differences between them will not diminish. Because we are interested in the variation of social policies across countries over time, we use  $\sigma$ -convergence.

<sup>13</sup> Standard deviation:  $\sigma = \sqrt{\frac{\sum_{i=1}^N (y_i - \mu)^2}{N}}$ ; in which  $y$  is the level of social expenditures in country  $i$ ;  $\mu$  is

the average level of social expenditures in the selection of countries and  $N$  is the number of countries in the selection. Coefficient of variation =  $\sigma / \mu$ . Because the standard deviation rises with the mean of the data set, it is valuable to use both the standard deviation and the coefficient of variation.

This hierarchical cluster analysis will help to find groups of cases with similar characteristics in a data set. Therefore, this method is particularly useful to identify welfare regimes empirically. Hierarchical cluster analysis groups countries together based on similarities across a set of variables. Since the results of cluster analyses depend strongly on the methodological choices on cases, variables and statistical measures the concept of welfare regime is operationalised. The variables included in the cluster analyses, all indicators of social policies, are *old age related expenditures* as a percentage of GDP, *expenditures on active labour market policies* as a percentage of GDP, *unemployment related expenditures* as a percentage of GDP, *incapacity related expenditures* as a percentage of GDP and *gross unemployment replacement rates*.<sup>14</sup> Unemployment replacement rates indicate the proportion of income from work which is replaced by unemployment benefits. In addition to the four expenditure variables, the unemployment replacement rate is a good quantitative measure for social policy change.<sup>15</sup> Again we controlled for demographic and cyclical effects. The old-age related expenditures are divided by the percentage of people aged 65 and older and the unemployment related expenditures are divided by the unemployment rate. In the cluster analyses the same countries are included as in the convergence analyses, except for Luxembourg because of a lack of data.<sup>16</sup>

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<sup>14</sup> All these variables (except for the replacement rates) are public expenditures.

<sup>15</sup> Unfortunately, because of this selection of policy related variables, two other welfare regime dimensions, which are socio-economic situations and political situations, are excluded. This, however, does not harm our results, because the objective of this study is not to test the validity of the several welfare regime typologies, but to investigate to what extent welfare regime theory can help to explain patterns in social expenditures. The included variables even give a more direct representation of social security regimes than socio-economic variables like 'GDP per capita' or political variables like 'level of trust'.

<sup>16</sup> Regarding the cluster analyses, three more decisions have been made. First, to create a common scale across the variables and to ignore the impact of their absolute magnitudes, they are standardised into z-values. Second, as a measure for the distances between cases, we chose the squared Euclidean distance measure. Third, for the clustering of the cases the Ward method is used. This method maximises the homogeneity within groups and therefore the differences between groups (Everitt e.a., 2001: 60).

## 4. Results

### *Convergence*

Table 1 illustrates patterns of convergence in social expenditures of the EU countries and the non-EU countries. Between 1985 and 2003 the standard deviation and the coefficient of variation of social expenditures of the EU 15 declined, while the average level of social expenditures increased. Also the average level of social expenditures of the non-EU countries increased, but the standard deviation shows only a decrease between 1991 and 2003. Obviously, these data indicate rather a 'race to the top' than a 'race to the bottom'.

**Table 1. Total social expenditures as percentage of GDP**

Country	1985	1991	2003	Change '85-'03
Austria	23.86	23.88	26.05	2.19
Belgium	26.12	25.75	26.48	0.36
Denmark	24.18	26.30	27.58	3.41
Finland	22.79	29.62	22.45	-0.34
France	25.77	25.96	28.72	2.95
Germany	23.63	23.70	27.25	3.62
Greece	17.89	17.96	21.30	3.41
Ireland	21.81	16.35	15.93	-5.88
Italy	20.81	20.13	24.19	3.38
Luxembourg	23.14	22.29	22.25	-0.89
Netherlands	24.22	24.41	20.67	-3.55
Portugal	10.96	14.69	23.51	12.55
Spain	17.78	20.71	20.31	2.52
Sweden	29.71	32.13	31.28	1.57
United Kingdom	19.56	18.59	20.64	1.07
EU 15 Average	22.15	22.83	23.91	1.76
EU 15 Standard deviation	4.26	4.69	3.86	
EU 15 Coefficient of variation	0.19	0.21	0.16	
Australia	13.02	15.22	17.90	4.88
Canada	17.27	20.56	17.27	0.00
Japan	11.15	11.369	17.734	6.58
New Zealand	17.97	22.16	18.01	0.05
Norway	17.94	23.53	25.07	7.13
Switzerland	14.84	14.54	20.52	5.68
United States	12.91	14.38	16.20	3.29
Non-EU 7 Average	15.01	17.39	18.96	3.94
Non-EU 7 Standard deviation	2.56	4.29	2.77	
Non-EU 7 Coefficient of variation	0.17	0.25	0.15	

*Data source:* OECD Social Expenditure Database (SOCX 2007).

From this point we analyse the controlled data because, as stated above, we are interested in the patterns which are controlled for demographic and cyclical factors. As Table 2 shows social expenditures have risen in both the EU countries and the non-EU countries. Between 1985 and 2003 the EU-average level of social spending as percentage of GDP per 1 percent of the population in need increased by 5 percent points and the non-EU average by 8 percent points. But between 1991 and 2003 the expenditures in the EU countries decrease slightly, while they are increasing in the non-EU countries. Again, the interpretation of the trend in the controlled data is more important than the interpretation of the absolute level, but see for a discussion of the method section 3.

**Table 2. Total social expenditures as percentage of GDP controlled for % of population aged 65+ and for unemployment rate**

Country	1985	1991	2003	Change '85-'03
Austria	1.34	1.30	1.28	-0.06
Belgium	1.04	1.16	1.06	0.02
Denmark	1.06	1.07	1.36	0.31
Finland	1.30	1.47	0.92	-0.38
France	1.11	1.11	1.09	-0.02
Germany	1.09	1.15	1.01	-0.08
Greece	0.85	0.83	0.79	-0.06
Ireland	0.80	0.63	1.04	0.24
Italy	0.90	0.75	0.86	-0.04
Luxembourg	1.43	1.61	1.27	-0.16
Netherlands	0.96	1.23	1.14	0.17
Portugal	0.53	0.82	1.02	0.48
Spain	0.54	0.69	0.73	0.19
Sweden	1.42	1.54	1.36	-0.05
United Kingdom	0.74	0.76	1.00	0.26
EU 15 Average	1.01	1.07	1.06	0.05
EU 15 Standard deviation	0.27	0.30	0.18	
EU 15 Coefficient of variation	0.27	0.28	0.17	
Australia	0.72	0.73	0.99	0.26
Canada	0.83	0.95	0.84	0.01
Japan	0.86	0.78	0.74	-0.12
New Zealand	1.22	1.03	1.08	-0.14
Norway	0.98	1.08	1.29	0.31
Switzerland	0.99	0.90	1.05	0.06
United States	0.68	0.75	0.89	0.20
Non-EU 7 Average	0.90	0.89	0.98	0.08
Non-EU 7 Standard deviation	0.17	0.13	0.17	
Non-EU 7 Coefficient of variation	0.19	0.14	0.17	

*Data source:* Total social expenditures: OECD Social Expenditure Database (SOCX 2007); Unemployment rate and population 65+: The World Bank: World Development Indicators; Unemployment rate Germany (1985), New Zealand (1985) and Switzerland (1985): OECD Labour Force Survey. For details see the appendix.

After controlling for the unemployment level and the ageing of populations, this study does not confirm the European 'race to the top' in the last decade. Concerning the convergence patterns there is an interesting difference between EU countries and non-EU countries. Based on both the standard deviation and the coefficient of variation, since 1991 the EU countries are converging, while the non-EU countries are diverging.<sup>17</sup>

A comparison between Table 1 and Table 2 illustrates the effects of the correction for unemployment and ageing. First, the increase in social expenditures in the EU 15 between 1991 and 2003 turns into a decrease or at least stay constant after controlling. Furthermore, the decreases in standard deviation and coefficient of variation in the 7 non-EU countries between 1991 and 2003 change into increases after the correction.<sup>18</sup> Also at the individual level of countries the effects of the correction are visible. Before the correction Austria's social expenditures have increased since 1985, but after the correction they have decreased. Likewise, the signs of France, Germany, Greece, Italy, The Netherlands, Sweden, Japan and New Zealand changed.

Convergence of EU member states implicates that social expenditures of some countries have decreased or increased, while others remained unchanged. Therefore, the second step of the study is to classify the patterns of controlled social expenditures of European countries. Figure 1 shows three kinds of patterns<sup>19</sup>; decreased social expenditures (Luxembourg, Finland, Germany, Japan and New Zealand), constant<sup>20</sup> expenditures (France, Italy, Greece, Austria, Sweden, Belgium) and increased expenditures (Denmark, Norway, Switzerland, Ireland, Portugal, UK, Austria, US, Spain, Netherlands).

Interestingly, those patterns of expenditure change do not reflect any specific types of welfare states. The question, then, is whether the welfare regime literature matters in terms of changes in social expenditures. After all, several scholars (Hemerijck, 2002; Palier, 2006; Pierson, 2001b; Bannink and Hoogenboom, 2007) argue that each welfare regime has to deal with their own challenges and that they follow their own reform trajectories. To examine whether these reform trajectories for specific welfare regimes can be found back in social expenditures patterns, the study continues with a cluster analysis. Since the results of the convergence analysis indicate that there is convergence across the EU member states between 1991 and 2003, the question is whether empirically the welfare regime typology in 1991 differs from the typology in 2003.<sup>21</sup>

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<sup>17</sup> These results also hold for analyses with slightly different periods or a slightly different set of countries.

<sup>18</sup> Partial analyses (not displayed here) indicate that the increase in average is mainly influenced by ageing of populations, while the convergence is mainly influenced by the unemployment level.

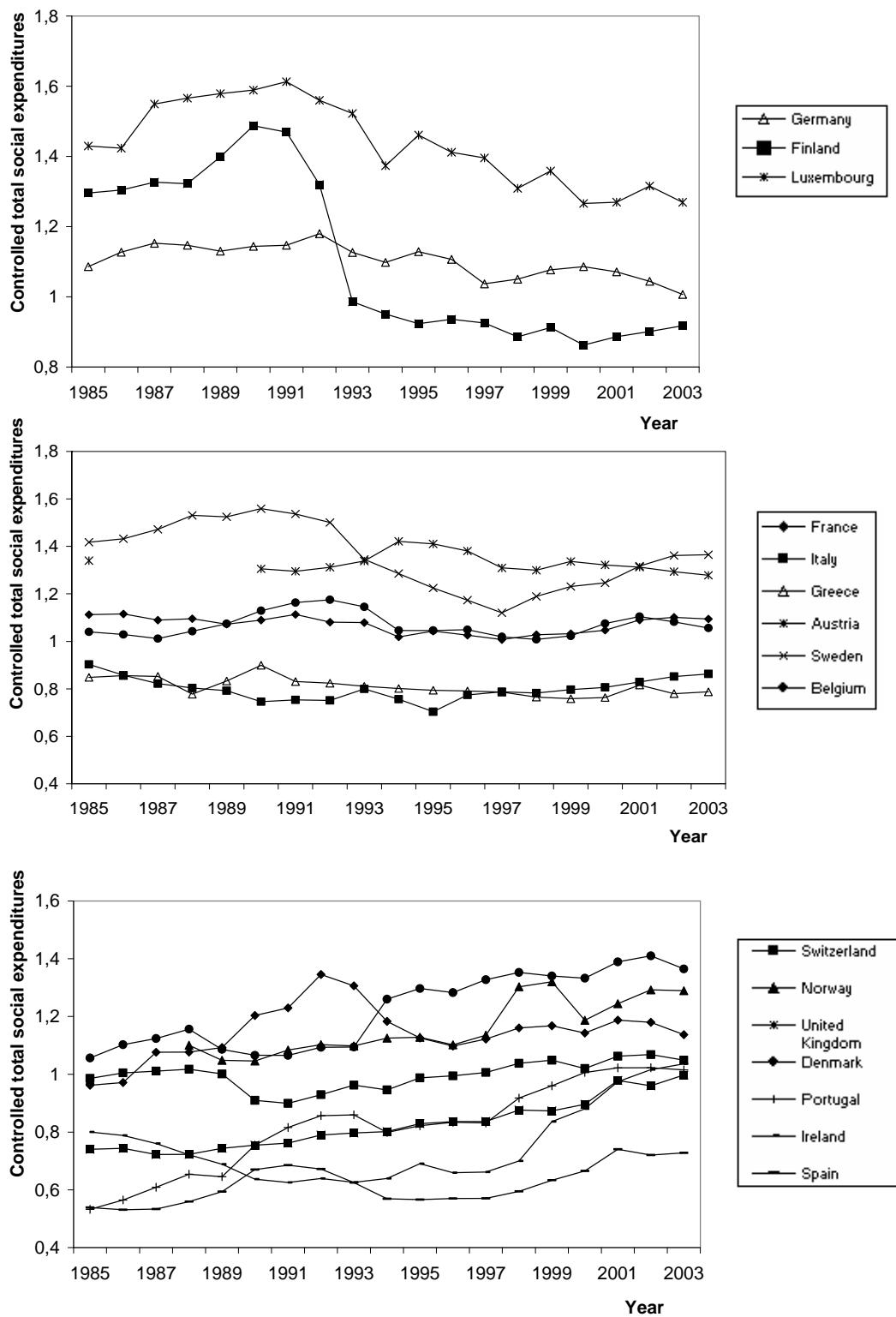
<sup>19</sup> Data source: Total social expenditures: OECD Social Expenditure Database (SOCX 2007).  
Unemployment rate: The World Bank: World Development Indicators

Unemployment rate Germany (1985-1990) and Switzerland (1985-1990): OECD Labour Force Survey  
Population 65+: The World Bank: World Development Indicators

<sup>20</sup> The bandwidth of constant social expenditures is a change between 1985 and 2003 of  $\pm 0,06$ .

<sup>21</sup> Unfortunately, because of a lack of data, it is not possible to do a cluster analysis with data from before 1991.

**Figure 1. Countries with decreasing, constant and increasing total social expenditures patterns**



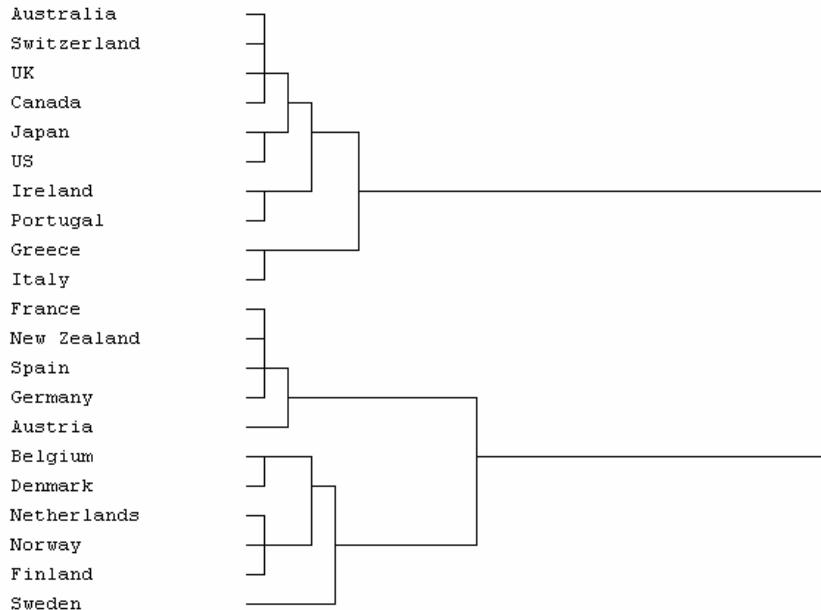
Source: see below Table 2

### Regime pattern analysis

To identify welfare regimes empirically, we used hierarchical cluster analysis. This statistical method generates groups of countries, based on similar scores on the variables of the countries within a cluster, and different scores on the variables of countries between clusters. The output of such an analysis can be graphically presented with a dendrogram (figure 2 and 3). In a dendrogram, a vertical line represents a cluster, while a horizontal line stands for the distance between two clusters. The longer a horizontal line, the larger the differences between two clusters. The clustering process in a dendrogram goes from the left to the right, starting with many clusters and ending up with only one cluster. Going to the right, every time two clusters fuse into one new cluster, based on the size of an error sum of squares criterion. At each stage it is aimed to minimize the increase in the total within-cluster error sum of squares (Everitt e.a., 2001: 60).

Whereas the uncontrolled data for 1991 and 2003 (not displayed here) does not prove to be very meaningful, the controlled data hints at groups of states following similar patterns. The 1991 data in figure 2 actually confirm the existence of the widely discussed four welfare state regimes, namely the Liberal, Southern, Bismarckian and Scandinavian. From the top of the dendrogram to the bottom, we can identify respectively the liberal welfare regime with Australia, the UK, Canada, Japan, the US and Ireland, the Southern welfare regime with Greece and Italy, the Bismarckian welfare regime with France, Germany and Austria, and the Scandinavian welfare regime with Belgium, Denmark, the Netherlands, Norway, Finland and Sweden. With only few exceptions (Switzerland, Portugal, Belgium, New Zealand, Spain) countries follow Leibfried's (1992) line of typology.

**Figure 2. Dendrogram based on 1991 data of 21 countries**



*Data sources:* Variables Old age, Incapacity, Active Labour Market Policies and Unemployment: OECD Social Expenditure Database (SOCX 2007).

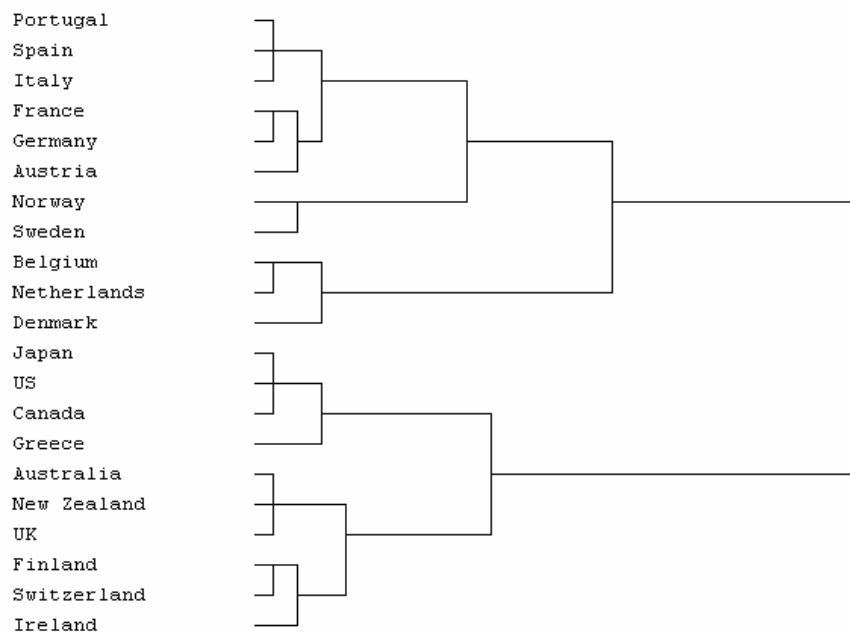
Variable Replacement rate: OECD Tax-Benefit Models.

Unemployment rate and population 65+: The World Bank: World Development Indicators.

For details see the appendix.

The 2003 data in figure 3, however, are not as straight forward. Whereas we still find evidence for Continental and Mediterranean regimes, the Scandinavian patterns has dissolved entirely with Belgium, the Netherlands and Denmark forming one group on their own, Norway and Sweden another, and Finland forming a group with Switzerland and Ireland. Since only a small number of social expenditure variables are included, instead of the large range of indicators on which the regime typologies are usually based, these results do not necessarily falsify the existing welfare regime typologies in the literature. However, it is very interesting that, although we used only a small number of indicators, it is possible to identify the welfare regimes in the 1991 data. Hence, most relevant here is that the data show a change in characteristics of welfare regimes between 1991 and 2003.

**Figure 3. Dendrogram based on 2003 data of 21 countries**



Source: see below figure 2

## 5. Discussion and conclusion

The two consecutive quantitative analyses in this paper demonstrate that, on the one hand, there is no 'race-to-the-bottom' in social security expenditures across EU member states and that, on the other hand, the classical social welfare regime patterns might have lost momentum.

The thesis of 'social race to the bottom' can be called into question with regard to its basic theoretical principles (Ferrera, Hemerijck and Rhodes, 2001) and empirical findings (Castels, 2001). Our study shows that since 1991 social expenditures in EU member states have converged and have increased on average, whereas non-EU member states have predominantly diverged. Controlled for cyclical and demographic factors, it seems plausible to ascribe these policy changes to increased European integration in the policy field which has lead to 'more' social security across EU member states. But have these patterns of change, then, been following the logic of the underlying welfare state regime typologies?

To examine the abovementioned convergence pattern in the EU, we evaluated the stability of existing regime patterns. We, eventually, find a link between the type of regime and the long-term type trajectory which, however, has so far been rejected unanimously by existing large-*n* studies. In line with recent developments in the field (Bouget, 2003; Kühner, 2007; Saint-Arnaud and Bernard, 2007) validating existing typologies of welfare regimes our data have found clear variation of welfare reform along the lines of regime types. The 1991 data, so to speak, has reproduced the welfare regime typology. But in the following decade, distinctions among the welfare regimes of the countries do not sustain through time as such. A tentative hypothesis therefore may be that convergence of social security policies does seem to have effected the way welfare regimes are shaped. Apparently, basic political profiles generally do not hold together well and promote change rather than continuity.

More recent data from 2003, however, illustrate that these regime patterns are in flow. In clear contrast to Kautto and Kvist (2002) who argue that the Nordic welfare regime still exists despite Europeanisation and globalisation, this study shows, based on a limited number of indicators, that the Scandinavian regime pattern, in particular, has lost momentum. But, then, how can we explain the different patterns of change in the Scandinavian countries? While Denmark has considerably increased its social expenditures over the last decades, Finland's figures show the diametrically opposing effect, with Sweden ranging in between with no significant sign of change. Is it politics? A change in the political system? Future studies will have to address this puzzle more in detail.

Another, ongoing, puzzle is the impact of the EU. Can we, in addition to social expenditures, also find convergence in social security policy changes at the national level and is it possible to link such an eventual policy convergence to EU policies (Marlier e.a., 2007)? Furthermore, we have to keep in mind that also alternative explanations, such as economic growth, primarily in Southern Europe, might explain convergence of social expenditures across EU member states (Cornelisse and Goudswaard, 2002). For now, we have found some empirical evidence of convergence of social expenditures across EU member states, which seems to have been triggered by European integration. On the other hand these patterns of change go hand in hand with continued and interrupted links with social welfare states regime typologies.

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## Appendix Data

**Table A1 Demographic and social expenditures data**

	Population aged 65+ <sup>a</sup>			Unemployment rate <sup>b</sup>			Old age related expenditures <sup>c</sup>		Old age related expenditures (controlled) <sup>d</sup>	
	1985	1991	2003	1985	1991	2003	1991	2003	1991	2003
Australia	10.13	11.27	12.45	7.9	9.5	5.7	3.65	3.90	0.32	0.31
Austria	14.21	15.04	16.17	3.6	3.4	4.2	11.36	12.79	0.76	0.79
Belgium	13.81	15.14	17.37	11.3	7.0	7.7	6.83	7.16	0.45	0.41
Canada	10.25	11.43	12.90	10.6	10.3	7.6	4.18	3.98	0.37	0.31
Denmark	15.09	15.59	14.81	7.8	9.1	5.4	7.44	7.17	0.48	0.48
Finland	12.48	13.56	15.47	5.1	6.6	9.0	8.21	5.77	0.60	0.37
France	12.95	14.31	16.54	10.2	9.0	9.7	9.53	10.46	0.67	0.63
Germany	14.56	15.07	17.78	7.2	5.6	9.3	9.44	11.28	0.63	0.63
Greece	13.30	13.92	17.74	7.8	7.7	9.3	9.86	11.54	0.71	0.65
Ireland	10.56	11.44	10.98	16.7	14.7	4.4	3.35	2.86	0.29	0.26
Italy	12.74	15.70	19.33	10.3	11.0	8.7	8.50	11.39	0.54	0.59
Japan	10.30	12.44	18.72	2.6	2.1	5.2	4.13	8.04	0.33	0.43
Luxembourg	13.19	12.32	13.83	3.0	1.5	3.7	9.11	4.49	0.74	0.32
Netherlands	12.07	12.95	13.88	13.1	6.9	4.3	5.99	5.41	0.46	0.39
New Zealand	10.48	11.26	12.09	4.2	10.3	4.6	7.67	4.39	0.68	0.36
Norway	15.72	16.31	15.05	2.6	5.4	4.4	7.17	7.04	0.44	0.47
Portugal	11.99	13.71	16.75	8.6	4.3	6.4	4.72	8.85	0.34	0.53
Spain	12.01	14.12	16.59	21.0	16.1	11.3	7.40	7.86	0.52	0.47
Sweden	17.86	17.71	17.12	3.1	3.2	5.8	8.86	10.11	0.50	0.59
Switzerland	14.15	14.37	15.47	0.9	1.8	4.1	5.69	6.78	0.40	0.44
United Kingdom	15.11	16.01	15.89	11.3	8.4	4.8	5.36	5.89	0.33	0.37
United States	11.69	12.30	12.29	7.2	6.8	6.0	5.38	5.46	0.44	0.44
EU 15 Average	13.46	14.44	16.02	9.34	7.63	6.93	7.73	8.20	0.54	0.50

a Population aged 65 and above as percentage of the total population.

b The number of people unemployed as a percentage of the labour force.

c Old age related expenditures as a percentage of GDP.

d Old age related expenditures as a percentage of GDP, divided by the percentage of people aged 65 and above (a).

*Data sources:* (a) and (b): The World Bank: World Development Indicators; Unemployment rate Germany (1985), New Zealand (1985) and Switzerland (1985): OECD Labour Force Survey; (c) OECD Social Expenditure Database (SOCX 2007).

**Table A2 Social expenditures and replacement rate data**

	Unemployment related expenditures <sup>a</sup>		Unemployment related expenditures controlled <sup>b</sup>		Incapacity related expenditures <sup>c</sup>		Expenditures on ALMP <sup>d</sup>		Gross unemployment replacement rate <sup>e</sup>	
	1991	2003	1991	2003	1991	2003	1991	2003	1991	2003
Australia	1.62	0.72	0.17	0.13	1.64	2.45	0.34	0.38	26.49	22.49
Austria	1.00	1.01	0.29	0.24	2.54	2.60	0.34	0.62	31.21	31.59
Belgium	3.00	3.34	0.43	0.43	2.73	2.29	1.15	1.21	41.56	42.15
Canada	2.28	0.78	0.22	0.10	1.34	0.99	0.62	0.37	19.25	15.11
Denmark	4.48	3.33	0.49	0.62	3.27	4.25	1.24	1.62	51.90	49.51
Finland	2.13	2.13	0.32	0.24	4.96	3.52	1.35	0.91	38.80	35.74
France	1.75	1.85	0.19	0.19	2.11	1.75	0.91	1.07	37.58	39.40
Germany	1.34	1.80	0.24	0.19	1.59	1.98	1.37	1.12	28.78	29.00
Greece	0.54	0.42	0.07	0.04	1.21	1.02	0.40	0.20	12.71	12.78
Ireland	2.03	0.97	0.14	0.22	1.56	1.54	1.24	0.68	29.31	38.06
Italy	0.64	0.44	0.06	0.05	1.88	1.77	0.21	0.67	2.50	33.72
Japan	0.29	0.45	0.14	0.09	0.58	0.67	0.30	0.30	9.92	7.77
Luxembourg	0.52	0.93	0.34	0.25	3.48	3.63	0.23	0.26	-	-
Netherlands	2.36	1.59	0.34	0.37	6.01	3.88	1.10	1.06	53.15	52.64
New Zealand	1.83	0.77	0.18	0.17	3.03	2.87	0.83	0.44	30.43	28.00
Norway	1.11	0.75	0.21	0.17	5.05	5.38	0.93	0.80	38.83	34.38
Portugal	0.43	1.14	0.10	0.18	2.66	2.57	0.69	0.71	34.36	40.81
Spain	3.62	2.25	0.23	0.20	2.44	2.36	0.68	0.68	33.50	35.97
Sweden	1.55	1.25	0.49	0.21	5.33	6.00	2.30	1.28	29.40	24.48
Switzerland	0.32	1.03	0.18	0.25	2.01	3.28	0.23	0.72	21.92	33.00
United Kingdom	1.09	0.26	0.13	0.05	2.39	2.47	0.54	0.51	17.78	16.35
United States	0.48	0.54	0.07	0.09	1.08	1.25	0.23	0.14	11.10	13.77
EU 15 average	1.77	1.51	0.26	0.23	2.94	2.77	0.92	0.84	31.61	34.44

a Unemployment related expenditures as a percentage of GDP.

b Unemployment related expenditures as a percentage of GDP, divided by the unemployment rate (Table A1, variable b).

c Incapacity related expenditures as a percentage of GDP.

d Expenditures on active labour market policies as a percentage of GDP.

e The proportion of income from work which is replaced by unemployment benefits.

*Data sources:* (a) (c) and (d): OECD Social Expenditure Database (SOCX 2007); (e): OECD Tax-Benefit Models.

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