ECONOMIC AND SOCIAL MODELS IN EUROPE AND
THE IMPORTANCE OF REFORM

Martin HEIPERTZ, PhD*
European Central Bank
Frankfurt/Main, Germany

Melanie WARD-WARMEDINGER, PhD*
European Central Bank
Frankfurt/Main, Germany

Abstract

This paper contributes to the ongoing debate on European economic and social models. It provides a comparative assessment of fiscal and regulatory policies in 17 industrialised countries (the EU15, US and Japan) and presents the records of these countries in attaining key economic and social objectives.

Social and economic systems that feature efficient public sectors and flexible market structures tend to experience reasonably sustainable public finances, high economic growth, education standards and employment, and well-functioning markets. Anglo-Saxon countries broadly fit this mould, albeit, seemingly, at some cost of income equality. A more pronounced emphasis on welfare state policies and the corresponding relatively high levels of public spending bring benefit to income distribution in the Nordic countries while the resulting inefficiencies in their economies are counterbalanced by flexibility in labour and particularly product markets. Also, a number of reform-minded European countries have improved their fiscal and regulatory policies while significantly enhancing the functioning of markets, fiscal sustainability and economic performance. This was generally attained without jeopardising social objectives. On the other hand, those continental and Mediterranean countries that maintain market inefficiencies and at the same time

* The opinions expressed in this paper are those of the authors and do not necessarily reflect those of the ECB. We gratefully acknowledge very helpful comments and inputs from two anonymous referees plus G. Corneo, A. Ferrando, P. Moutot, A. van Riet and L. Schuknecht.

** Received: October 2, 2007
Accepted: July 23, 2008
sustain expensive and inefficient welfare states generally suffer from low growth and employment and less well-functioning markets and face serious risks to their economies’ fiscal sustainability. The findings of this note support calls for the comprehensive reform of fiscal policies, as well as of product and labour markets.

Keywords: fiscal policy, regulation, Nordic model, welfare state, efficiency, reform

1 Introduction

Recently, a prominent debate on how EU Member States should deal with economic and social challenges has emerged in Europe under the catch-phrase “Economic and Social Models”. Should Europe follow the “Nordic model”, often (rightly or wrongly) characterised as big government, high taxes and cradle-to-grave security, or rather the “Anglo-Saxon model” with presumably low spending, low taxes, flexible markets, but social inequality? Are there viable alternatives that combine good economic performance with adequate social protection and well-functioning markets?¹

The debate derives from three major policy challenges that are pertinent particularly to Europe and the functioning of EMU. First, for the period covered by our data (i.e. up to 2005) and by historical standards, a number of countries are experiencing relatively low economic growth coupled with relatively high unemployment and welfare systems that have partially come under considerable strain. Second, globalisation means that established “first-world” economies (with relatively large public sectors) face new and increasing challenges (regarding e.g. the viability of labour-intensive industries and some services) in the face of competition from emerging players such as China and India (with significantly smaller public sectors), which in turn may exert pressure on domestic economic and social systems. Third, the combination of low fertility rates and rising life expectancy in the euro area implies that the working-age population will decrease whereas the proportion of elderly people in the population will increase (ECB, 2006). This will have important consequences for labour supply, real GDP growth, public finances and income distribution. In response to these challenges, in 2000, the EU agreed on the so-called “Lisbon Strategy”, which was re-launched in 2005 with the focus on “growth and jobs” in order to improve the implementation of reforms (ECB, 2005).

In this paper, we analyse the effects of economic and social policies with regard to public sector and market regulations of 17 industrialised countries (the EU15, US and, to a lesser extent due to data limitations, Japan). In relation to the ongoing debate on economic and social models, we provide stylised facts on country performance as regards the attainment of those key policy objectives that are relevant for the economic and social models debate. These include the sustainability of public finances, solid growth and high

¹ See, for example, The Economist (2006): “Admire the best, forget the rest”, 9 September; Financial Times (2006): “The devaluation saga of Sweden’s industrial rebirth”, 11 September. European policy fora have also discussed EU common social values, the structural challenges posed by globalisation and demographic change, as well as the associated need for a structural reform and an appropriate economic and social policy response in the EU Member States (e.g. the 7-8 April 2006 informal ECOFIN Council meeting in Vienna http://www.eu2006.at/de/News/information/0804InformalECOFIN.html).
employment in a well-educated population, a “fair” income distribution and well-functioning labour and product markets. We also assess the findings on performance from a perspective of efficiency by looking at the relevant fiscal and regulatory policy inputs. These include public expenditure policies, tax policies and market regulation.  

The remainder of this paper is structured as follows: The next section outlines the conceptual approach and discusses methodological caveats and measurement issues. The third section describes public expenditure patterns across the sample countries and assesses the efficiency of fiscal policy with regard to the sustainability of public finances, growth, employment and education standards, as well as income distribution. The fourth section turns to the characteristics of market regulation and the assessment of the functioning of labour and product markets with regard to employment, output and market adjustment. Section 5 summarises the findings and conclusions.

2 The conceptual approach

Before starting to evaluate economic and social policy regimes in industrialised countries, it is worth briefly discussing conceptual issues and related measurement challenges.

The assessment of countries’ economic and social models ideally requires three elements: (i) a set of objectives that governments should attain, (ii) reasonably high-quality and internationally comparable indicators on the “performance” of countries in attaining these objectives (iii) indicators that measure the policy inputs used to attain such performance.

As regards (i), it is not trivial to define the relevant objectives of government policies. The economic and political philosophy debate provides some guidance. Classical economists from Adam Smith have strongly emphasized the role of government in providing functioning markets aimed at enhancing the opportunities of individuals for specialization and mutually beneficial exchange. More recently, part of the public finance literature, notably Musgrave, has defined economic efficiency, stability and income distribution as the main government and, in particular, fiscal policy objectives. Another way of looking at these two approaches is to argue that individual preferences or “utility” are affected by growth and economic prosperity that is stable and broadly-based, and the liberty to pursue emerging opportunities in the market place. Of course, these two approaches are closely intertwined and functioning markets, efficiency-enhancing public spending and well-designed social policies can in principle support growth, equality and opportunities.

As regards (ii), we try to measure the degree to which government policies help the attainment of these objectives via a number of comparable indicators that measure fiscal sustainability (which is a prerequisite for macroeconomic stability), real economic growth and education standards (prosperity), the Gini coefficient (that measures income distribu-
tion) and indicators of the functioning of labour, capital and product markets (that measure opportunities in the markets).

As regards the measurement of policy inputs (iii), we look at indicators of policy inputs in the fiscal sphere (total public spending, spending on transfers and education) and in the regulatory sphere (labour, product and capital market regulation) with respect to the attainment of policy objectives. This will help to gauge the overall policy efficiency.

For the sake of scope and comprehensiveness of our presentation and analysis, we employ a simple approach and look at stylised facts via correlations between policy performance and input variables and their changes over time. The stylised facts approach has obvious shortcomings, as it cannot establish firm propositions about the direction of causality, nor can it describe the greater complexity of multivariate relationships. Moreover, some important output and input features cannot be easily quantified, or are not fully comparable across countries. There is also considerable confusion as to the meaning of different concepts, and the choice of indicators at times strongly influences the results (for example, see Annex 1). The advantage of this approach, however, is that it allows the compilation, structuring and identification of instructive patterns from a rich, complex and dispersed set of policy variables. Moreover, we also try to underpin our results by putting the findings into perspective within the broader and technically more sophisticated discussion in the literature.3

3 The role of fiscal policy

3.1 The size of government

Section 2 suggests that, before assessing countries’ performance, it is worth taking stock of the magnitude of the overall public resource use. Countries differ strongly in the relative size of their public and private sectors. Figure 1 shows developments in the total expenditure ratio for general government (which includes all levels of government, as well as social insurances) over the last decade for the 17 sample countries and puts it into relation to social spending, i.e. the biggest expenditure item of national budgets. Despite a significant divergence between individual countries, it shows that the role of the public sector is very important in all of these economies today and it strongly correlates with social spending.

Figure 1 also shows that the Nordic countries as well as several continental and Mediterranean countries are associated with “moderately big” to “very big” governments, with public spending at levels near or above 50% of GDP. Government spending in Anglo-Saxon countries, particularly the US and Ireland, but also Spain and Luxembourg, ran-

3 For more detailed and technical elaborations on the efficiency of expenditure policies see, for example, Afonso, Schuknecht and Tanzi (2005) in the debate on the “quality of public finances”. This approach is the basis for the ongoing work on the quality of public finances, carried out by a corresponding EPC Working Group mandated by the ECOFIN Council, as well as OECD and IMF. The discussion in these fora looks at government performance through a range of variables that proxy the attainment of key policy objectives (growth, income distribution, stability, functioning markets and equal opportunity) relative to the fiscal expenditure inputs, using a comparative perspective to derive efficiency scores.
Figure 1 Total and social public spending

Social public spending and total public spending in % of GDP, 2001

\[ y = 1.3388x + 14.445 \]
\[ R^2 = 0.8865 \]

Source: AMECO Database

Gross total social public expenditure in % of GDP, 2001

Source: OECD
ges between 30% and 40% of GDP. Japan could also be seen among this group, although the delineation of its public sector is less straightforward compared to the other countries. In any case, no public sector today is small when compared to the expenditure levels after World War II and up to the 1960s (when spending in industrialised countries barely averaged 30% of GDP), and Western budgets, including that of Japan, look even larger when compared to today’s emerging market economies in Asia, where public spending is well below 30% of GDP.

A substantial proportion of a country’s public sector nowadays is devoted to its welfare state policy, reflected in a high correlation between social and total spending. Figure 1 on the right-hand graph also reports gross social spending ratios in the sample countries. These largely determine the differences in total spending across countries, since differences in spending on public consumption and investment across industrialised country governments are much more limited. As regards social spending, the Nordic countries and several continental and Mediterranean countries again stand out as the “biggest” spenders. However, the numbers presented here are not fully comparable. There are considerable discrepancies between gross and net social expenditure levels, as some governments – especially those of the Nordics – levy direct taxes and social security contributions on cash transfers, while others pay out untaxed benefits or even provide tax credits (see Adema (2001) as well as Adema and Ladaique (2006)).

3.2 Fiscal sustainability

Here we first consider the sustainability of fiscal policies across countries or, in other words, whether the size of government and the corresponding social model might interfere fundamentally with fiscal discipline. This is important because fiscal discipline clearly constitutes a prerequisite for maintaining macroeconomic and price stability and thus for the confidence in the euro. Looking at developments over recent decades reveals some interesting patterns (see Figure 2).

For the average of euro area countries, the strong growth of public spending since the 1970s was accompanied by a rapidly deteriorating fiscal balance. These deficits then persisted in many countries in the 1980s and coincided with a continued debt build-up until the mid-1990s. Developments over the last decade, however, show that significant expenditure reform can improve the fiscal position of a country as well as of the euro area average. A large number of countries reduced public spending over this period as part of a comprehensive reform effort that also included important structural measures, reversing the upward trend in expenditure developments and regaining positive primary balances and more sustainable fiscal positions. For the euro area as a whole, this implied that the general government budget balance improved until 2000, before deteriorating again in more recent years when expenditure reform came to a halt. Figure 2 also illustrates the strong correlation between expenditure reform and improving fiscal balances between the mid 1990s and 2005. In the wake of deficit reductions, public debt started to fall. As a result

---

4 See Hauptmeier, Heipertz and Schuknecht (2006), as well as Schuknecht and Tanzi (2005) for a detailed discussion.
Figure 2: Changes in expenditure, deficits and debt for the euro area average

General government expenditure and revenue ratios in the euro area (% of GDP)

General government debt and deficit ratios in the euro area (% of GDP)

Source: AMECO Database
of these developments, the following pattern in the sustainability of individual countries with respect to their deficit and debt situation emerges today (see Table 1):

The first two columns show that the Nordic countries, while being the biggest (total and social) spenders, still have sound budget balances and relatively low debt ratios. The Anglo-Saxon countries report rather diverse budget positions but mostly moderate debt ratios, with the notable exception of the US. The picture for continental and Mediterranean

<table>
<thead>
<tr>
<th>2005 gen. gov. balance (% of GDP)</th>
<th>2005 gross national debt (% GDP)</th>
<th>Ageing-related fiscal burden 2005</th>
<th>S2 indicator (baseline scenario)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Anglo-Saxons</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>1.0</td>
<td>27.6</td>
<td>7.2</td>
</tr>
<tr>
<td>UK</td>
<td>-3.5</td>
<td>42.8</td>
<td>4.0</td>
</tr>
<tr>
<td>United States</td>
<td>-3.8</td>
<td>65.0</td>
<td>n.a.</td>
</tr>
<tr>
<td>group average</td>
<td>-2.1</td>
<td>45.1</td>
<td>5.9</td>
</tr>
<tr>
<td><strong>Continental and Mediterranean States</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>-2.9</td>
<td>66.8</td>
<td>3.2</td>
</tr>
<tr>
<td>Germany</td>
<td>-3.3</td>
<td>67.7</td>
<td>2.7</td>
</tr>
<tr>
<td>Greece</td>
<td>-4.5</td>
<td>107.5</td>
<td>n.a.</td>
</tr>
<tr>
<td>Italy</td>
<td>-4.1</td>
<td>106.4</td>
<td>1.7</td>
</tr>
<tr>
<td>Portugal</td>
<td>-6.0</td>
<td>63.9</td>
<td>10.1</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>-1.9</td>
<td>6.2</td>
<td>8.2</td>
</tr>
<tr>
<td>group average</td>
<td>-3.8</td>
<td>69.7</td>
<td>5.2</td>
</tr>
<tr>
<td><strong>Continental and Mediterranean Reformers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>-1.5</td>
<td>62.9</td>
<td>0.2</td>
</tr>
<tr>
<td>Belgium</td>
<td>0.1</td>
<td>93.3</td>
<td>6.3</td>
</tr>
<tr>
<td>Netherlands</td>
<td>-0.3</td>
<td>52.9</td>
<td>5.0</td>
</tr>
<tr>
<td>Spain</td>
<td>1.1</td>
<td>43.2</td>
<td>8.5</td>
</tr>
<tr>
<td>group average</td>
<td>-0.2</td>
<td>63.1</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>Nordics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>4.9</td>
<td>35.8</td>
<td>4.8</td>
</tr>
<tr>
<td>Finland</td>
<td>2.6</td>
<td>41.1</td>
<td>5.2</td>
</tr>
<tr>
<td>Sweden</td>
<td>2.9</td>
<td>50.3</td>
<td>2.2</td>
</tr>
<tr>
<td>group average</td>
<td>3.5</td>
<td>42.4</td>
<td>4.1</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>-6.5</td>
<td>158.9</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

Note: The ageing-related fiscal burden is calculated as the no-policy change increase in health and pension spending minus reduced public spending on education as published by the Economic Policy Committee (EPC) and the European Commission (2006).

Source: AMECO Database, Commission Services, EPC.
countries is most diverse. The Mediterranean countries except Spain report the largest imbalances. Several reform-minded countries (Austria, Belgium, the Netherlands and Spain) typically show sound or improving fiscal positions. A case apart is Japan, showing overall a seriously weakened fiscal position, to the extent that indicators are available.

For the EU15 countries, when adding the ageing-related fiscal burden to the picture (third column), we find that there is less of a pattern along these country groups but rather according to the degree of reforms undertaken in the past. Note that public spending is expected to increase by as much as 10% of GDP until 2050 on account of higher pension, health and long-term care costs if there are no further social security reforms. Portugal, Ireland, Spain and (despite the unavailability of estimates) Greece will be particularly affected if they fail to undertake the necessary reforms.

For an overall assessment of fiscal sustainability, as recently conducted by the EU Commission and the EPC in the Sustainability Report (2006), it is instructive to consider the so-called S2 sustainability indicator (fourth column of Table 1). Starting from a country’s current fiscal position, it measures the size of a hypothetical permanent budgetary adjustment that would be required to meet the inter-temporal budget constraint over an infinite horizon (often referred to as the “tax gap”). The indicator confirms the previous picture of the large diversity across countries, which can broadly be grouped as follows: The Nordics show a negative gap in the sense that their long-run sustainability appears to be reasonably assured. This should be viewed in conjunction with very ambitious expenditure reforms that these countries have undertaken. However, given that the relatively high spending levels of these countries will have to be sustained by correspondingly high revenue ratios, competitive pressures in a globalising world economy might cause the sustainability issue to resurface for any high-spending country. Other reforming countries, and in particular Ireland, also show relatively low sustainability gaps and, given lower expenditure ratios, appear to be less vulnerable to this kind of pressure. Lastly, the non-reforming continental European and Mediterranean countries can already be seen as facing a serious risk in terms of long term fiscal sustainability, as reflected in their comparatively high S2 indicators.

Hence, from several perspectives we find very diverse fiscal positions across industrialised countries. Over recent decades, strong spending growth was first correlated with deteriorating deficit and debt positions. Expenditure and social security reforms in recent years have significantly reduced sustainability risks in (a number of) continental European and Nordic countries. Sustainability risks appear not to be correlated with large public sectors and social spending per se, but with large imbalances and unreformed welfare systems of a number of countries in continental and Mediterranean Europe. The public finances of continental and Mediterranean countries that have undertaken reforms appear to be much better positioned.

3.3 Economic growth

A key issue in the debate over the “right” economic and social model and the appropriate role of government is the growth performance of individual countries. Economic growth and its underlying “ingredients” – employment and capital and their productivity – are viewed as the key to economic prosperity and welfare. Proponents of “small”
governments point to higher economic efficiency if more resources are left to the private sector.

Also in the light of global competition for scarce human and physical capital, excessively high taxes are viewed as having a deterrent effect and could further undermine growth prospects in the future. As argued by Tanzi (2001), globalisation (through e-commerce, electronic money, intra-company trade, off-shoring, financial innovation etc.) can have a significant negative impact on countries’ ability to raise revenues through their tax systems. The findings in the literature on this theme are rather diverse but, on the whole, larger public sectors tend to feature lower growth, especially insofar as government expenditure is devoted to consumption items such as wages or social welfare and as the corresponding high tax and social security burden hampers potential growth (for the relevant theory and evidence see Afonso, Schuknecht and Tanzi, 2005).

Looking at the public expenditure and growth data from a historical perspective confirms this picture. Average economic growth declined during the 1960s in almost all industrialised countries, partially due to secular growth trends and a slow-down in catching up growth, but also due to the expansion in public spending. Figure 3 illustrates that, for example, an increase in the public spending ratio by 10 percentage points between 1960 and 2000 was accompanied by an over 1 percentage point decline in the annual growth rate. Higher social spending and direct taxes coincided in particular with declining employment ratios and investment over this period (see also the labour market section below and Tanzi and Schuknecht, 2003). As a result, the converging trend of per capita incomes across industrialised countries which could be observed between the 1950s and 1970s seems to have slowed down or even halted in the past two decades.

Figure 3 Public spending and economic performance
Change in total spending 1960-2000 versus change in per capita growth, 1960s-1990s

![Figure 3 Public spending and economic performance](image)

The story would, however, conclude prematurely if we simply stated that large government equals low efficiency and poor growth performance. We also need to take a look at the more recent experience, following the major expenditure reforms undertaken by a number of countries in the last decades (especially the United Kingdom, Ireland, Finland, Sweden, Spain, the Netherlands, Belgium and, to a lesser extent, Austria). All these countries have at some point achieved reductions in their primary spending ratios of at least 5 percentage points over a period of seven years. The expenditure reductions of these “ambitious reformers” were flanked by important structural reforms of the benefit systems.

Figure 4 Expenditure reform and economic growth

Ambitious expenditure reforms and trend growth

![Diagram showing ambition expenditure reforms and trend growth](image)

Note: Trend output is calculated using a production-function approach as explained in European Commission (2007: 296).

Social spending and potential growth performance

![Diagram showing social spending and potential growth performance](image)

Note: Potential growth is calculated using a production-function approach, as explained in European Commission (2007: 296).
Source: AMECO.
as well as the factor and product markets (signalling the importance of cross-effects of reforms; for a more detailed analysis see Hauptmeier et al. 2006). During these reforms, trend growth accelerated significantly. At the same time, “timid reformers”, i.e. larger continental European as well as Mediterranean countries (except Spain) did not undertake comparable measures and experienced anaemic and even declining trend growth. This is reflected in the left-hand graph of Figure 5, where T0 stands for the year of maximum public expenditure as a ratio of GDP when reforms started. Within a few years, ambitious reformers experienced a strong revival of the upward trend, while the timid or non-reformers did not go through such an experience.

The long-run relationship between the public sector behaviour and growth dynamics is also shown on the right-hand side of Figure 4, where contained growth in social spending is seen to coincide with comparatively more positive developments in the potential growth rate over time. Ireland again is a particular case at hand, showing a substantial reduction in the average social spending-to-GDP ratio in the 1990s compared to the 1980s, in conjunction with a remarkable pick-up in potential GDP growth, which, to some extent, can also be assigned to the effects of this country’s rapid catching-up process. Improvements in the potential growth rates of a number of continental, Mediterranean and also Nordic countries are more limited, as most countries also show, on average, substantial increases in social spending in the 1990s compared to the 1980s.

A number of caveats, however, are warranted. The reported findings emerge from case studies on expenditure and structural reforms and – short of proving a causal relation – illustrate the coincidence of reforms with higher growth. Moreover, there is no certainty that these trends can continue into the future in the sense that faster growth would truly reflect a higher trend path or only the transition dynamics to a higher output level. On the whole, it nevertheless appears that large public sectors coincide with lower growth (and hence, in this domain, countries show poor performance and low efficiency). However, reforms in spending and tax systems coupled with flexible market structures can, at least temporarily, counteract this tendency with reasonable success, as exemplified currently by the Nordic countries. We will come back to the issue of what it takes to be able to “afford” large public sectors in later sections.

3.4 Education standards

Human capital formation is widely acknowledged as an important source of economic growth and also a policy tool in mastering some of the challenges posed by globalisation. As the public sector is the principal financier and provider of education in most countries, both the level and efficiency of public spending should be particularly important in consolidating an economy’s human capital base, the main comparative advantage of today’s industrialised countries.

It is, however, telling that empirical evidence points to limits on the link between the amount of spending on education and outcomes (see e.g. Afonso et al. (2005) and Afonso and St. Aubyn (2005)). Aghion et al. (2007) suggest that the link between a university’s level of private funding and its research performance is positive when a university has autonomy in spending its budget. Other studies (for instance, Hanushek and Luque, 2003)
reveal little or no evidence of a positive link between increased spending on education and student test performance. The work by the OECD has also pointed to the existence of relevant inefficiencies in public spending on (secondary) education.

Table 2 shows that all euro area countries increased education expenditure over the last decade. However, the proportion of annual GDP spent on tertiary education was significantly smaller than in the US, predominantly due to far fewer funds from the private sector. Furthermore, the level of expenditure per student in the euro area countries was generally lower, particularly at the tertiary level. Arguably much could be achieved in a number of countries if existing funds were used more efficiently and if incentives for private funding were enhanced.

### Table 2 Expenditure on education (in USD)

<table>
<thead>
<tr>
<th>Country</th>
<th>Change in expenditure on educational institutions for all services per student (1995 to 2004)</th>
<th>Expenditure on educational institutions for tertiary education as a % of GDP in 2004</th>
<th>Annual expenditure per student in euros 2004</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primary, secondary and post-secondary</td>
<td>Tertiary</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Public</td>
<td>Private</td>
<td>Primary education</td>
</tr>
<tr>
<td>Belgium</td>
<td>n.a.</td>
<td>n.a.</td>
<td>1.2</td>
</tr>
<tr>
<td>Germany</td>
<td>105</td>
<td>107</td>
<td>1.0</td>
</tr>
<tr>
<td>Ireland</td>
<td>181</td>
<td>126</td>
<td>1.0</td>
</tr>
<tr>
<td>Greece</td>
<td>192</td>
<td>151</td>
<td>1.1</td>
</tr>
<tr>
<td>Spain</td>
<td>136</td>
<td>167</td>
<td>0.9</td>
</tr>
<tr>
<td>France</td>
<td>n.a.</td>
<td>n.a.</td>
<td>1.2</td>
</tr>
<tr>
<td>Italyb</td>
<td>105</td>
<td>130</td>
<td>0.7</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Netherlands</td>
<td>136</td>
<td>101</td>
<td>1.0</td>
</tr>
<tr>
<td>Austria</td>
<td>n.a.</td>
<td>122</td>
<td>0.8</td>
</tr>
<tr>
<td>Portugalab</td>
<td>154</td>
<td>98</td>
<td>0.9</td>
</tr>
<tr>
<td>Finland</td>
<td>122</td>
<td>110</td>
<td>1.7</td>
</tr>
<tr>
<td>Euro area</td>
<td>141</td>
<td>124</td>
<td>1.0</td>
</tr>
<tr>
<td>Denmark</td>
<td>121</td>
<td>123</td>
<td>1.8</td>
</tr>
<tr>
<td>Sweden</td>
<td>117</td>
<td>99</td>
<td>1.6</td>
</tr>
<tr>
<td>UK</td>
<td>120</td>
<td>93</td>
<td>0.8</td>
</tr>
<tr>
<td>USA</td>
<td>130</td>
<td>132</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Note: euro area average is unweighted. *Data on annual expenditure per student refer to public expenditure only.* †Data on change in expenditure per student refer to public expenditure/institutions only. ‡Index of change between 1995 and 2004 (Expenditure is expressed at 2004 constant prices, deflated by GDP deflator; values represent an index with 1995=100). §Converted using PPPs for GDP, based on full-time equivalents, converted from US dollars to euro at January 2004 rates.

3.5 Income distribution

In a debate on economic and social models, the defenders of the “big” government and large social spending typically refer to far-reaching income re-distribution and a low poverty rate as a key policy objective (see also Sapir, 2005). It is argued that re-distribution leads to more “justice” (assuming a strong connection between outcome equality and social justice). Furthermore, for political economy reasons, re-distribution is said to facilitate electoral acceptance of the necessary change and transformation in a globalising economy. On the other hand, opponents of high levels of social spending not only point to a need for high tax burdens and the associated opportunity costs in terms of lower growth, but also flag the loss of individual opportunity and collective economic adaptability, when people are caught in poverty traps, when employment opportunities disappear or when the fundamental microeconomic incentives of people and employers to save, invest, work and adapt are distorted.

Figure 5 Gini coefficient and social spending
It is undeniable that countries with large public sectors and social spending show a more equal income distribution (and, hence, a better “performance” in achieving outcome equality). This is confirmed by all available indicators, be it poverty rates, the income share of the poorest quintile of households or the so-called Gini coefficient, which in this paper is understood to denote the skewness of household disposable income distribution. Gini coefficients (which range between 0 and 1, 1 equalling perfect inequality) show higher numbers and hence higher inequality in countries with small public sectors (see the left-hand graph of Figure 5).

It is not surprising that the Nordic countries achieve the lowest Gini coefficients and thereby the comparatively highest degree of income equality in their populations, given that much of their public sector activity consists of re-distribution and the provision of social benefits. This is in contrast with the Anglo-Saxon countries, which accept higher levels of inequality in return for a less prominent (and less expensive) role of the public sector. However, inequality is high even in a number of countries that extensively engage in public social spending, such as the Mediterranean sample countries. This underlines the fact that the design and efficiency, rather than the sheer size of the welfare systems, may be most important for their success.

While on the surface, the figures suggest that higher social spending can result in a more equal income distribution, there are three points worth discussing (beyond questioning the value of outcome equality as a standard for social justice): (i) how many resources are used (i.e. how efficient is social spending?), (ii) what are the opportunity costs in terms of growth and employment, and (iii) would a reduction in public expenditure incur a high “cost” in terms of increasing inequality? As regards the first point, Figure 6 implies that, in principle, one percentage point improvement in the Gini coefficient would “require” a two percentage points increase in the social spending ratio. Or, more concretely, Ireland’s income distribution is only a little less equal than the Germany’s or France’s (but more equal than the Italy’s), although its social spending ratio is only half as high. This finding is consistent with the literature in the sense that equal income distribution is increasingly dependent on rising fiscal (and economic) costs. The main reason is the very poor targeting of a large part of social spending and hence its inefficiency, especially in countries with already large public sectors (for more details, see Immervoll et al., (2005), Pearson and Martin, (2005), as well as Tanzi and Schuknecht, (2000)). As we argued above, the required levels of social security contributions are likely to lead to a significant loss of growth and employment.

Finally, and from a forward-looking perspective, the correlation between changes in the level of social expenditure and changes in the Gini coefficient is not significant, which should be particularly relevant for reform-anxious policy makers. The right-hand graph of Figure 6 suggests that, if anything, countries that raised social spending experienced a larger deterioration of the Gini coefficients than countries that lowered social spending. In Italy, for example, increases in social spending did not prevent inequality from rising, whereas a sharp reduction in social spending in Ireland was still associated with a rise in

\[ y = 0.046x + 2.087 \quad \text{and} \quad R^2 = 0.006, \quad \text{i.e. an even less significant relationship between increases in social spending and improvements in equality – re-enforcing the argument that higher social spending does not necessarily lead to a reduction of inequality.} \]
equality. This finding reinforces the notion that, besides the level of public expenditure in the social policy domain, other factors must have a bearing on the effectiveness and efficiency of public policies for income distribution.\(^6\)

In sum, while the amount of public money spent on social policy appears to be correlated with equality in income distribution, the efficiency with which that money is used could be improved. In recent years, expenditure reforms seem to have been successfully conducted at a virtually zero or very little loss of equality relative to the experience of countries that did not reform. Large potential gains in efficiency hence appear to be hidden in this domain. Furthermore, the large differences in tertiary education funding between the US and the euro area could be addressed by enhancing conditions for private funding.

4 The role of regulatory policy: labour and product markets

4.1 Factor input: labour

This section turns to the factor market regulation and conducts an assessment of the functioning of labour markets with regard to employment, output and market adjustment. High levels of labour utilisation are a sign of good performance, while labour flexibility\(^7\) indicators reflect the quality of the regulatory policy input\(^8\). Improvements in the labour market performance are seen as an important prerequisite for the euro area countries to prepare for the negative consequences of demographic changes and globalisation, besides their importance for the absorption of asymmetric shocks in a monetary union. As the size of the working age population decreases (due to ageing) and the competition sharpens (due to globalisation), it is important that labour market participation and employment rates continue to increase. In addition, ongoing restructuring and transformati-on require that euro area labour markets match job searchers and vacancies efficiently in order to retain and reabsorb workers from declining industries.

Both the Anglo-Saxon and Nordic countries (particularly the United States, the United Kingdom, Denmark and Sweden) and Japan have already achieved relatively high total employment rates (see Figure 6), high labour market participation rates (total, for women, for the young and old) and low aggregate unemployment, including youth unemployment. Two of the continental reformers, the Netherlands and Austria, have also shown relatively good employment performances. However, the Nordics seem to incur some detrimental effects of their social model on private employment, which they partially offset thro-
Figure 6 Employment policy outputs

Employment rate, percentage of persons at the working age (15-64)

Total unemployment rate, % of total labour force

Note: The 45 degree line represents a ‘no-change’ scenario over the time period considered. Countries above the line have increased their scores, whereas countries below have decreased them.

ugh relatively high expenditure on active labour market policies (ALMPs, which include e.g. job placement services and training) and, in particular, very high rates of public sector employment (see Figure 7). Subtracting the rate of public employment from the total figures in fact reduces the Danish and Swedish employment performance from outstanding (1st and 3rd position) to average (10th and 11th, see Figure A in Appendix 1).

**Figure 7** Expenditure on labour market policies and public employment

Public expenditure on active labour market measures as a percentage of GDP 2004

<table>
<thead>
<tr>
<th>Country</th>
<th>ALMP expenditure as % of GDP</th>
<th>Public employment as % of total population</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>4.5</td>
<td>16</td>
</tr>
<tr>
<td>Greece</td>
<td>4.0</td>
<td>14</td>
</tr>
<tr>
<td>Japan</td>
<td>3.5</td>
<td>12</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>3.0</td>
<td>10</td>
</tr>
<tr>
<td>Italy</td>
<td>2.5</td>
<td>8</td>
</tr>
<tr>
<td>Austria</td>
<td>2.0</td>
<td>6</td>
</tr>
<tr>
<td>Ireland</td>
<td>1.5</td>
<td>4</td>
</tr>
<tr>
<td>Portugal</td>
<td>1.0</td>
<td>2</td>
</tr>
<tr>
<td>France</td>
<td>0.5</td>
<td>0</td>
</tr>
<tr>
<td>Germany</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>Belgium</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>Netherlands</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>Denmark</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>Sweden</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>Finland</td>
<td>0.0</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: Active measures include e.g. training and job seekers support.
Source: OECD (2004; 2005a; 2006); AMECO and OECD. No data available on ALMP expenditure for Spain.
In contrast, the Anglo-Saxon countries, whilst also applying the principles of some activation policies (e.g. making unemployment compensation conditional on job search and training), have tended to achieve good labour market outcomes through increased market efficiency with generally low expenditure on ALMPs and considerably more moderate public employment.

Continental and Mediterranean European countries generally show relatively unfavourable employment performance, with low to moderate expenditure on ALMPs and despite sometimes relatively high public employment (especially in the case of France).

Figure 8 shows that many countries have made some progress in increasing the flexibility of their labour markets (and hence reducing their regulatory policy inputs) over the last decade. For example, the levels of employment protection legislation and tax wedges have fallen in a number of cases between the first half of the 1990s and the early 2000s (shown by the clustering of countries on the right-hand side of the 45 degree line in Figure 8).

The percentage of trade union density provides a proxy measure for a number of labour market regulations such as health and safety regulations and regulations on working hours, and has been found to be related to the degree of real wage rigidity. Figure 8 shows that trade union density also decreased in most countries over this period, although the union coverage remained at 68% or over for all the EU-15 Member States, with the exception of Luxembourg and the UK (at 60% and 30% respectively), and even increased (by about 10%) in the Netherlands, Portugal, Spain, Sweden and Denmark over the last decade.

The Anglo-Saxon countries typically exhibit relatively flexible labour markets and the lowest degree of employment protection legislation (both on temporary and regular contracts), low tax wedges (in line with their relatively small governments), low replacement rates and average to low trade union densities (and coverage for the UK). Nordic countries, on the other hand, favour high degrees of social protection, relatively high replacement rates and tax wedges (in line with their relatively large governments) as well as high trade union density and coverage, but exhibit moderate levels of Employment Protection Legislation (EPL). Most Mediterranean European countries are characterised by relatively strict EPL, but otherwise group together around or above the median on the other input indicators, along with the continental countries. Certain countries stand out as having significantly more rigid labour market institutions, such as Belgium and France, with relatively high rigidity scores on all four of the measures presented.

Linking rigidity to performance of labour markets highlights some important influences of their regulatory design on economic outcomes. Firstly, strict EPL on regular contracts is found to significantly worsen the job prospects of new labour market entrants particularly the young, by reducing job turnover and hiring (see Bertola et al. (2002), Jimeno and Rodriguez-Palenzuela (2002), OECD (2004), and the first panel in Figure 10, although the correlation here is not strong). Secondly, the lower job turnover supported by strict EPL increases both the duration of unemployment and the proportion of the long-term unemployed (see OECD (2006) and the second panel in Figure 9). These two indicators show
that the earlier pattern of overall employment rates repeated, with Anglo-Saxon, Nordic and some of the reform-minded continental European countries performing best.

Thirdly, recent work by OECD (2006) argues that the negative interaction between EPL on regular contracts and employment also reduces the responsiveness of employment
Tax wedge (social security contributions and personal income tax less transfer payments as percentage of gross labour costs)

[Diagram showing tax wedge data for various countries in 1993 and 2003]

Replacement rates (average of the gross unemployment benefit replacement rates)

[Diagram showing replacement rates data for various countries in 1993 and 2003]

Note: The 45 degree line represents a ‘no change’ scenario over the time period considered. Countries above the line have increased their scores, whereas countries below have decreased them.

France has a very low rate of union density, below 10%; however, union coverage (that is, the proportion of workers covered by union agreements, whether or not they are union members) was estimated at 90% in 2000. Replacement rates measure the generosity of unemployment benefits through considering the average of benefit levels relative to income from obtaining employment.

Figure 9 Interaction of EPL and labour market outcomes

Strictness of EPL (aggregate measure: value 0 to 6 – low to high EPL) and the rate of youth unemployment (15 to 24 year olds)

![Graph showing interaction of EPL and youth unemployment](image)

Note: The equation shows the fit and significance (p-value) of the regression line.

\[
y = 0.588x + 1.498
\]
\[
P-value (0.10) R^2 = 0.1855
\]

and wages to adverse shocks. The analysis connects the reform of EPL on temporary contracts in a number of countries over recent years to the significant increase in the share
of temporary jobs in total employment (e.g. in Germany, France, Italy, the Netherlands, Portugal and Spain). This could suggest that, while reducing overall EPL may actually boost employment, the burden of employment-related adjustment costs now falls clearly on temporary rather than permanent contract workers.

As a consequence of the possible negative effects of EPL on employment and labour market adjustment, the policy debate has recently paid close attention to the Danish “flexicurity” model. This system is said to “protect the worker, not the job”, being characterised by relatively low levels of EPL in conjunction with generous unemployment benefits (and corresponding high taxes and ALMP measures). In addition, job turnover is relatively efficient in Denmark, possibly as a result of relatively long notification periods which allow displaced workers to search for their next job in good time. As a result, the rate of long term unemployment is low. However, it must be said that EPL levels are still higher in Denmark than in the Anglo Saxon countries (see Figure 8) and long term unemployment rates are still higher than in the US (Figure 9).

In addition, systems based on high taxes and generous social support suffer from high tax wedges, which are seen to have a negative effect on labour market outcomes by reducing the supply and demand of labour resources. Moreover, high net replacement rates prolong unemployment spells and associated welfare losses. Figure 11 shows the negative and significant relationship between an increase in direct tax rates and employment on the one hand (left-hand panel), and between the level of marginal tax rate and hours of work on the other (right-hand panel). Anglo-Saxon countries experience higher employment outcomes (in terms of people employed, both in changes and levels, and hours worked), which can be associated with their relatively low average taxes. Mediterranean countries (such as Spain, Greece, and Portugal) combine moderately higher average taxes with above-average hours of work, but below-average employment rates. The Nordics and even more so some continental European countries (particularly Belgium, France and Luxembourg) generally tend to have higher marginal tax rates on labour and less favourable employment performance than Anglo-Saxon countries and Japan.

One can further identify important interactions between the choice and design of particular components of benefit systems and labour market performance. For example, the unemployment compensation systems that offer generous benefits of long or infinite duration have been found to distort labour supply by reducing job search intensity and by lowering the opportunity cost of not working. The interaction of benefits and taxes on labour can create unemployment or inactivity traps, especially for low-paid or low-skilled workers on the margins of the labour market. Badly designed eligibility criteria for disability programmes along with the provision of early retirement schemes have been found to offer routes to early labour market exit, reducing the employment of older wor-
Figure 11 Interaction of taxes and labour market outcomes
Change in direct taxes versus the change in the employment rate, 1969s to 1990s

The marginal tax rate versus the average annual hours of work per worker

Note: The equation shows the fit and significance (p-value) of the regression line.

kers. Badly designed legislation to limit worker abuse may have negative effects on average annual hours of work.\footnote{See, for example, Haveman et al. (1991).}
Benefit systems also interact with economy-wide economic outcomes and adjustment mechanisms. Recent work by the OECD (2006) argues that social safety nets relying on passive income transfers are less effective in dealing with permanent supply shocks (e.g. technological change) as opposed to temporary demand shocks (e.g. stemming from investment and stock cycles). Generous benefit systems therefore reduce hardship in downturns, but, if poorly designed, may also delay labour market adjustment and therefore lead to a greater persistence of low activity resulting from shocks. This suggests a trade-off between the positive effects of benefit systems in cushioning the initial negative impact of adjustment and reducing the capacity of labour markets to rebound. The OECD (2006) finds that over the period 1995 to 2005, the persistence of economic slack tended to be stronger in countries where social safety nets are more extensive. This finding is supported by a number of econometric studies which confirm that social safety nets are costly in that they increase the persistence of high unemployment and lower activity after an economy has been hit by a negative shock.\textsuperscript{16} A number of studies have also found evidence that countries with low estimates of output gap persistence (in other words, countries where any differences between actual and potential output – representing production efficiencies - are generally short lived) predominantly include the Anglo-Saxon and Nordic countries.\textsuperscript{17} In contrast, output gaps are found to be highly persistent in the large continental European countries as well as Japan. This suggests that for countries to reap the rewards from benefit systems in terms of reducing personal hardship, but also to avoid negative consequences of such systems for adjustment, systems need to tread a fine line. This is not an easy task – see, for example, Dixit (2007) who surveys the institutional economics literature, outlining the difficulty in identifying the components of successful institutional design. Nevertheless, a number of general guiding principles are outlined in European policy fora, such as those within the Lisbon agenda for jobs and growth.

4.2 Factor input: other markets

Flexibility in other areas of regulatory policy, such as the design of product markets, may not only improve economic performance in general but may provide important adjustment channels in the absence of flexible labour markets, particularly for countries that face political resistance to a comprehensive reform of social security systems. For example, some work by the OECD (2002) concludes that product market regulations can have important effects on labour market performance. Figure 12 therefore presents the extent of product market regulation in our 17 countries. It shows that almost all countries have experienced some degree of deregulation of their product markets over the last decade. Furthermore, particularly the Anglo-Saxon and Nordic blocks have benefited from relatively low levels of product market regulation over the last decade. This may have helped the Nordics to sustain their relatively large public sectors. As concerns Mediterranean and

\textsuperscript{16} Blanchard and Wolfers (2000) find that higher replacement rates, stricter EPL and a higher tax wedge lead to significantly persistent high unemployment following an adverse shock. Scarpetta (1996) finds a significant and positive effect of employment benefit rates and EPL on persistence. These results are confirmed in the recent work of Bassanini and Duval (2006) and Duval (2006).

\textsuperscript{17} See OECD (2006) and Cotis and Coppel (2005).
Figure 11 Product market regulation and labour market outcomes

Product market regulation: Aggregate measure (value 0 to 6 – low to high regulation)

\[ y = -2.2744x + 4.6163 \]

P-value (0.06) \( R^2 = 0.2189 \)

Note: The 45 degree line represents a 'no change' scenario over the time period considered - countries below the line have become less regulated. The equation shows the fit and significance (p-value) of the regression line.

Continental European countries, this group generally exhibits relatively rigid product markets, with the exception of a few reform-minded countries, notably the Netherlands.

The right-hand panel of Figure 11 demonstrates an example of possible cross-market effects, highlighting the negative correlation between the degree of product market regulation and labour productivity growth. Therefore countries with relatively low levels of product market regulation, such as Ireland, the US, UK, Sweden and Finland, also tend to experience relatively high levels of productivity growth. Work by the OECD, among others, has also emphasised the significant effect of stronger product market competition on employment. Here the product market regulatory environment has been found to account for up to 3 percentage points of deviations of the non-agricultural employment rate from the OECD average.

5 Synthesis and Conclusion

In this study, we have examined indicators of fiscal and regulatory policies and their correlation with a number of country performance indicators in domains relevant for the “economic and social model” debate, namely: the functioning of markets, economic growth, employment, education, income distribution and fiscal sustainability in 17 industrialised countries. Some interesting patterns emerge and partly confirm the findings from earlier studies in this debate (e.g. Sapir, 2005) but also reveal some interesting “news” as to the most appropriate grouping and characterisation of countries.

Anglo-Saxon countries combine relatively low and efficient public expenditure with flexible markets and strong economic and labour market performance. These countries typically ground their positive labour market outcomes on flexibility, with generally low levels of employment protection legislation, union membership and coverage, tax wedges and replacement rates, low expenditure on active labour market policies and moderate public employment. However, the Anglo-Saxon economic and social model produces larger income inequality associated with a lower degree of social protection.

Most Nordic countries have equally favourable employment outcomes – particularly in terms of the number (rather than hours) of people employed. However, they have tended to support this performance with relatively high expenditure on active labour market policies as well as with a degree of public sector employment that is extensive by any standard. Furthermore, the labour market components of their social model, with relatively high levels of EPL, union density, tax wedges and replacement rates, appear both relatively inflexible and costly – in terms of financing, in terms of foregone private sector employment and possibly also in terms of adjustment capacity to shocks (such as structural shocks resulting from globalisation). Their social and economic model, based on comprehensive safety nets and income equality, is made operational by high product market flexibility and relatively well-developed capital markets. The sustainability of their high levels of public spending in terms of tax revenue is questionable, especially when considering the challenges that may be posed by globalisation and increased international competition.
In contrast to both the Nordic and the Anglo-Saxon cases, most Mediterranean and continental countries in Europe exhibit mixed approaches with regard to both the choice and design of their market and social policy components. Lack of progress with structural reforms seems to have adverse effects on the labour market performance, economic growth and education standards, while at the same time burdening some of these countries with large and inefficient public sectors, which may in turn lead to sustainability concerns. Concurrently, product markets remain relatively rigid. A number of continental European countries experience low income inequality, but also relatively low levels of labour utilisation – both in terms of the number of people employed and hours worked. Many Mediterranean countries combine unfavourable employment performance and limited income equality.

Finally, a number of reform-minded continental European countries (most notably the Netherlands and Spain, but also Austria and Belgium) have significantly improved the performance and efficiency of their public sectors in the fiscal and regulatory sphere over the past two decades. This seems to have contributed to the better functioning of markets and improved growth and employment developments, at a little cost to social policy objectives.

From a more horizontal and policy-oriented perspective, this study suggests that public sectors may be much smaller in many European countries without necessarily implying very unequal income distribution, while boosting growth and fiscal sustainability. Better designed social safety nets may enhance the efficient allocation of resources and facilitate an economy’s adjustment to economic shocks without seriously undermining equalisation of incomes and social protection. Good regulatory policies in factor and product markets help economic efficiency and labour market performance, thereby also helping finance more generous social systems without putting fiscal sustainability at risk. Furthermore, fiscal reforms accompanied by comprehensive structural reforms have proved to result in significant improvements in the fiscal and economic performance without much cost in terms of social equality.\(^\text{18}\)

This supports calls for a careful approach to the reform of fiscal policies and labour and product markets to support the growth potential of the euro area. The cross-effects of the structural reform are significant, and success in one policy domain may either facilitate or inhibit the reform in others. While there is often no single correct strategy for all countries, countries can learn from each other to develop better labour market institutions and policies which will help to achieve the desired results. Guiding principles are set out within the framework of the Lisbon Agenda, for example, and individual countries have agreed on the need for reform. However, complexity of the reform process and political will often erect a barrier to reform progress. Predictions about the sustainability of “economic and social models” in the future are, of course, difficult to make. Not only demographic movements but also intensifying global competition for talents and capital are likely to put pressure on public expenditure, in particular on high social spending coupled with high tax rates and labour market inflexibility.

\(^{18}\) Schuknecht and Tanzi (2005) and Hauptmeier et al. (2006).
Annex 1

The current discussion on social and economic models at times suffers from confusion about the meaning of government performance versus efficiency. For example, Sapir

Figure A Employment as an indicator of performance (not efficiency)

Social model grouping according to total employment and poverty rate

Source: Sapir (2005:8).

Alternative grouping according to private employment and poverty rate (2000 or nearest)

Source: OECD, AMECO
(2005) finds that Nordic countries report high employment rates, interpreting this as an indication of efficiency. However, the employment rate is an output indicator that provides one measure of economic performance. It is not possible to say anything about the efficiency without looking at this performance relative to the inputs used (for example, the amount of public spending on government employees as well as active labour market policies and the degree of labour market protection).

Secondly, the findings on the performance of governments frequently depend on the choice of indicator. If, for example, total employment as performance indicator is replaced by private employment (i.e. an alternative output measure) the above-mentioned picture by Sapir looks very different, especially for the Nordic countries (see Figure 13). The right-hand panel shows that this alternative choice of indicator yields an alternative country grouping, reflecting the fact that the apparent labour market success of the Nordic countries is to a large part due to inflated public sector employment. Some of the reform-minded continental European countries (here Austria and the Netherlands) look comparatively more successful in the fight against poverty and unemployment than those countries that have to foot an enormous public wage bill in order to attain their overall satisfactory employment performance.
LITERATURE


