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Social Policy in the Economic and Monetary Union

Social Expenditures and Public Indebtedness in 15 EU Countries

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Abstract

The study focuses on the indirect effects of the Economic and Monetary Union on social policy choices, especially on the structure of public expenditure and the room for manoeuvre within national social policy. Do social expenditures crowd out other public spending or vice versa? This question can be examined by reference to the fiscal deficit and indebtedness criteria laid down in the Stability and Growth Pact, when we incorporate the interest payable on public debt into the structure of public expenditure. Based on panel data for 15 EU countries starting in the early 1990s, the analysis focuses separately on discrete time periods and sets of countries defined according to differing patterns of public indebtedness and deficits. The study also contains analyses based on statistical models exploring changes in the structure of public expenditure. As explanatory variables, we have used a variety of factors influencing social expenditures. The results show that the level of public indebtedness has a significant impact on changes in the structure of public expenditure. The share of social expenditure is seen to have declined especially in those countries which have rapidly paid down their public debt or which are running a budget surplus. At the same time, these countries show a relative increase in growth-promoting public expenditures. The study concludes with a discussion of the effects of the Economic and Monetary Union on different sectors of public economic policy.

Key words: The Lisbon Strategy, crowding out, Economic and Monetary Union EMU, Stability and Growth Pact, public economics

Tiivistelmä

Tämän tutkimuksen kohteena ovat talous- ja rahaliiton välilliset vaikutukset harjoitettavaan sosiaalipolitiikkaan, erityisesti jäsenvaltioiden sosiaalipoliittisten järjestelmien liikkumavaraan ja julkisten menojen rakenteeseen. Syrjäyttävätkö sosiaalimenot muita julkisia menoja vai syrjäyttävätkö muut julkiset menot sosiaalimenoja? Tätä voidaan tutkia vakaus- ja kasvusopimuksen sisältämien julkista velkaa ja budjettialijäämää koskevien kriteereiden näkökulmasta, kun julkisesta velasta aiheutuvat korkokustannukset otetaan huomioon julkisten menojen ryhmittelyssä. Tutkimuksessa on analysoitu 15 EU-maan muodostamaa paneeliaineistoa 1990-luvun alusta lähtien. Tarkastelua on täsmennetty sekä eri ajanjaksoihin että erilaisiin velkaantumisen ja alijäämäisyyden mukaan muodostettuihin valtioryhmiin. Tutkimuksessa on lisäksi tehty tilastollisia mallitarkasteluja, joissa on tutkittu julkisten kokonaismenojen rakenteen muutoksia. Selittävinä muuttujina on käytetty useita sosiaalimenoihin vaikuttavia tekijöitä. Tulosten mukaan julkinen velkaantuminen on yksi merkittävä julkisten menojen rakenteen muutoksiin vaikuttava tekijä. Sosiaalimenojen suhteellisen aseman heikentymistä voidaan havaita erityisesti nopeasti velkaa pienentäneissä maissa ja niissä, joissa julkinen talous on ylijäämäinen. Näissä maissa on vastaavasti kasvua tukevien julkisten menojen osuus suhteellisesti kasvanut. Tutkimuksen lopuksi käydään keskustelua talous- ja rahaliiton välillisistä vaikutuksista eri politiikkalohkoihin julkisen talouden sisällä.

Avainsanat: Lissabonin strategia, syrjäytys (crowding out), talous- ja rahaliitto EMU, vakaus- ja kasvusopimus, julkinen talous

Sammandrag

Föremålet för studien är den ekonomiska och monetära unionens indirekta verkningar på den socialpolitik som bedrivs, i synnerhet rörelsefriheten inom medlemsstaternas socialpolitiska system och de offentliga utgifternas struktur. Tränger socialutgifterna undan andra offentliga utgifter eller tränger andra offentliga utgifter undan de sociala utgifterna? Detta kan undersökas utgående från tillväxt- och stabilitetspaktens kriterier för offentlig skuldsättning och budgetunderskott, då man tar räntekostnaderna i anslutning till den offentliga skuldsättningen i betraktande vid grupperingen av de offentliga utgifterna. I studien har material som härrör från en panel bestående av 15 EU-länder och som gäller tiden från början av 1990-talet analyserats. Studien har fokuserats både på olika tidsavsnitt och på olika grupper av stater, indelade enligt graden av skuldsättning och underskott. Granskningen har också omfattat statistiska modeller, genom vilka man har studerat förändringar i de totala offentliga utgifternas struktur. Ett flertal faktorer som inverkar på socialutgifterna har använts som förklarande variabler. Resultaten visar att den offentliga skuldsättningen är en faktor med betydande inverkan på förändringar i de offentliga utgifternas struktur. En försvagning av de sociala utgifternas relativa ställning kan observeras speciellt i länder som snabbt minskat sin skuldsättning och i länder med ett överskott i de offentliga finanserna. I dessa länder har på motsvarande sätt de offentliga utgifter som stöder tillväxt proportionellt sett ökat. I studien diskuteras avslutningsvis den ekonomiska och monetära unionens indirekta verkningar på olika politikområden inom de offentliga finanserna.

Nyckelord: Lissabonstrategin, undanträngning (crowding out), ekonomiska och monetära unionen EMU, tillväxt- och stabilitetspakten, offentlig ekonomi

FOREWORD

There is little recent research on the Economic and Monetary Union that approaches the subject from the perspective of social policy. The main research of this type was done as far back as the second half of the 1990s when Finland was about join the EMU. This is reason enough for an updated look at various aspects relating to social policy and EMU. This publication also offers a great opportunity to draw the attention of the research community to a topic of great relevance to social policy.

A research undertaking of this type would be impossible without the expertise and support of public officials who participate in planning and decision-making. We wish to thank Deputy Director General Ilkka Kajaste of the Ministry of Finance, whose broad expertise and clarity of views made it easier for us to refine and sharpen our argumentation. Our thanks go also to the two anonymous experts consulted by the editing staff, whose comments helped us to improve especially the empirical part of the original manuscript. The views expressed here are the sole responsibility of the authors and do not necessarily reflect the views of their background organisations.

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1 A THIRD PERSPECTIVE ON EUROPEANISATION

The effects of the European integration process on the social security systems of the individual Member States have been widely discussed in recent years. Some of the interest has increasingly turned to the interplay between the internal market and social security. Much attention has been given to a range of multifaceted questions pertaining to the four freedoms of the internal market (of goods, services, capital and people) and to the interface between these freedoms and the "public good" and "solidarity", which set the boundaries within which they may be implemented. At the same time, several publications have analysed the impact of the 2000–2010 Lisbon Strategy for Growth and Employment on the social security systems of the Member States and the focusing of social policy within the European Union. These analytical perspectives highlight a link between the internal market and the traditional Community method on one hand, and between the Lisbon Strategy and the "New Governance" approach on the other. (See e.g. Szyszczak 2001; Kari and Saari 2005.) Together, they add up to a debate on the europeanisation of social policy, which sees the Member States and the Union becoming increasingly intertwined through closer cooperation and a focus on common targets – such as raising the rate of employment.

On both of these topic areas, there has been fruitful research which has in many ways fostered social policy debate and decision-making. At the same time, they conceal a third perspective on the europeanisation of social policy. It has to do with the effects of the European Economic and Monetary Union (EMU) and the Stability and Growth Pact on the social policy practice of the Member States. As a matter of principle, an analysis of europeanisation would have to address also the effect of the Member States' actions on the Union-level policies. This link between the Member States to the Economic and Monetary Union was particularly evident in spring 2005, as the Stability and Growth Pact, originally agreed in June 1997, was being adjusted to changed circumstances.

Superficially, the Stability and Growth Pact would seem to be exclusively about establishing the parameters for fiscal policy. Yet, given that social expenditure makes up a substantial share of the total public expenditures – in Finland a good half – it is clear that the Pact also has to do with the europeanisation of social policy, with establishing the parameters for social policy at the Union level. The parameters of the Pact greatly influence such factors as the long-term financial sustainability of social and health provision. Together with the Lisbon Strategy for Growth and Employment, the Pact has a powerful indirect effect on the shaping of social policy to promote employment and employability.

This study analyses the effects of public debt and deficits on the financial room for manoeuvre of the social policy systems of the Member States as a part of the public finances regulated by the Stability and Growth Pact. The relative share of social expenditure in total public expenditure is used as the explanatory variable. It illustrates

the connection between social expenditure and Economic and Monetary Union, whose focus is on total public spending (or, strictly speaking, on public debt and deficits). In principle, the Economic and Monetary Union can affect the Member States' financial room for manoeuvre by requiring that they match their spending more closely to the available revenue. This in turn is believed to lead to changes in the structure of public expenditure. Alternatively, EMU can be seen as boosting economic growth, lowering interest rates, reducing debt service costs both in absolute terms and in relation to GDP, and thereby increasing the room for manoeuvre available to public finances and, ultimately, to social policy. (See e.g. Kari and Pakaslahti 2003.)

However, such abstract chains of deduction do not allow us to proceed beyond hypothesis. One of the challenges that such deductions present is that they overemphasise the role of EMU by leaving aside such factors as the effects of demographic ageing and globalisation on the financing models and financial sustainability of social policy and on the targeting of spending. In longer-term analysis, at the very least, such factors are essential when it comes to estimating trends in social spending. Although we will not discuss the long-term factors placing the social security systems under pressure, it is clear that the effect of Economic and Monetary Union on social policy should be investigated with empirical and multivariate methods that allow for the consideration also of other factors having an impact on the development and targeting of expenditures.

Our analysis is limited to the fifteen Member States that comprised the European Union as of April 2004. Sufficiently reliable time series data are not available for Malta, Cyprus or the transitional economies of Central and Eastern Europe, all of which are more recent members of the Union. (In fact, it is somewhat perplexing that these countries are able to provide calculations of the amount of public expenditure and public debt for the years preceding their entry into the European Union, but cannot distinguish the amount of the social expenditure included in public spending.)

The question we wish to illuminate is how the ratio of social expenditure to total public expenditure has changed in countries differing in terms of the stability of their public finances. This allows us to examine the extent to which the parameters for public debt are likely to bring about changes in the internal structure of public expenditure and to see whether social expenditure crowds out other public expenditure or vice versa. Hence, the emphasis in this study will be on the structure of public finances and questions that have a particular relevance to social policy.

Our approach will be primarily functional (and not institutional).[1] This makes it necessary to narrow our perspective in two ways. First, we will have to operationalise social policy as the sum of social expenditure. We freely grant that by limiting our perspective to social expenditure we fail to account for the distribution of social rights

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[1] No analytically satisfactory way of combining the functional and institutional features has so far been found in internaional comparisons of social security systems. New methodologies may offer a solution to this problem. (See Hagfors and Kangas 2004.)

in the context of different risks and within different population groups. The same expenditure can be targeted in several different ways with regard to a particular social risk such as old age. Measures based on aggregate social expenditure, whether they reflect the level of expenditure, changes in expenditure or the number of recipients, may convey a different picture of the state of social provision than disaggregated measures reflecting the coverage and generosity of social security systems.[2] Economic and Monetary Union may also have organisational or structural effects, as meeting EMU targets may require "structural reforms". These include more precise targeting of benefits and services, the elimination of disincentives or increased incentivisation, and the focusing of expenditure on projects with an investment character. These effects must here be left out of the analysis. Yet our choice of perspectives is justified by the fact that Economic and Monetary Union, true to its name, approaches social policy from an economic perspective dealing only with Euros and percentages.

Secondly, our study, analysing the share of social expenditure in public finances, does not look at the question of economic room for manoeuvre from the point of view of so-called automatic stabilisers (changes in public income and expenditure) which are independent of the direct government interventions and whose practical manifestations include social income transfers and changes in tax progression. They tend to have a balancing effect on economic fluctuations.[3] On the income side, the stabilising factors are direct taxes on income and property as well as indirect taxes (Kajaste 2002, 151). Fixed individually, social insurance contributions do not have the same kind of stabilising effect. In Finland, around 30 percent of the total social expenditure can be considered as having an automatic stabilising effect. Within the Finnish social security system, so-called EMU buffer funds are regarded as having certain relevance in counteracting economic fluctuations. (Alho and Kaseva 1999, 131–148.) From a social policy perspective, it is important that structural changes in social expenditure should largely be a matter of deliberation and not follow inexorably from cyclical variations.[4]

We begin by describing the key institutional features of Economic and Monetary Union and the associated Stability and Growth Pact. Then, we outline the data and methods. In the empirical part of this study, we look at changes in the relative shares of different types of public expenditure and the possible influencing factors. Finally, we summarise the main results, discuss the difficulties which EMU has recently faced and outline forthcoming reforms. At the same time, we will evaluate the significance of such reforms for social policy.

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[2] A central issue in welfare state research, this is known as the *dependent variable problem* (see Kühner 2005).

[3] Clearly, given that public-sector operations are financed primarily with tax revenues and the assumption of new debt, the questions related to the structure of taxation and the international pressures for change facing it are particularly important, especially as public indebtedness is the focus of our analysis. The fact that we do not address the direct effect of taxation of social expenditures is due primarily our narrow definition of the research problem. Broadening the focus of the research to encompass questions of financing would take it outside the scope of this study.

[4] The question as to which factors follow from business cycles and which are a matter of deliberate decision-making is a difficult one and often requires an empirical analysis. If the goal is to calculate certain cyclical adjustments, a classification of public expenditures at the level of (im)precision of this study does not allow one to proceed any further with regard to this question. (On the calculation of cyclical adjustments see Alho and Kaseva 1999.)

2 ECONOMIC AND MONETARY UNION AND THE STABILITY AND GROWTH PACT

Economic and Monetary Union was implemented in three stages. Stage one (1990) involved the freeing of capital movements. The subsequent stages of the process were decided in the Maastricht Agreement (1992/93). A protocol annexed to the Treaty contains the following statement concerning the transition to the third stage of Economic and Monetary Union:

> THE HIGH CONTRACTING PARTIES
>
> Declare the irreversible character of the Community's movement to the third stage of economic and monetary union by signing the new Treaty provisions on economic and monetary union.
>
> Therefore all Member States shall, whether they fulfil the necessary conditions for the adoption of a single currency or not, respect the will for the Community to enter swiftly into the third stage, and therefore no Member State shall prevent the entering into the third stage.
>
> If by the end of 1997 the date of the beginning of the third stage has not been set, the Member States concerned, the Community institutions and other bodies involved shall expedite all preparatory work during 1998, in order to enable the Community to enter the third stage irrevocably on 1 January 1999 and to enable the ECB and the ESCB to start their full functioning from this date.

The second stage, which involved preparations for the adoption of a common currency, began in 1994. The third stage commenced at the beginning of 1999. During the third stage, the European Central Bank began operations, a common monetary policy was adopted, and there was a gradual transition to a common Euro currency (initially used in stock exchanges and electronic financial transactions). Later also wages, prices and bank notes became Euro denominated. The transition was concluded at the end of June 2002, when the Euro became the exclusive common currency of the Member States having acceded to EMU. Allowances were made for a transitional period, but most countries were able to adopt the Euro in the first few weeks of 2002.

Of the then Member States, the United Kingdom[5] and Denmark[6], as per agreement, opted out of EMU. Sweden, too, chose to remain outside EMU for a number of reasons related to economic and domestic policy.[7] However, the central banks of all of these countries do belong to the European System of Central Banks (ESCB). In this chapter, we analyse the EMU structures from a social policy perspective. The focus of our analysis are EMU, the Stability and Growth Pact and the policy decisions taken in Finland in 1997 and 1998 concerning the mechanisms between EMU and social policy.

2.1 EMU and social policy

The creation of European Economic and Monetary Union is one of the changes in the operating environment of social policy, whose impact on social policy systems was difficult, and continues to be difficult, to predict. One of the reasons for this is that the impact of EMU is difficult to distinguish from other external factors affecting the institutional structure of social policy systems. The greatest challenges facing social policy do not stem from EMU or other factors external to Finland. Instead, they are mostly likely related to such national-level phenomena as the increasing prevalence of atypical employment and non-standard households, changes in the economic dependency ratio, and trends in productivity and economic growth. However, this does not preclude the possibility that EMU could have an indirect impact on social policy institutions.

In estimating the potential impact of EMU on social expenditure, we must recognise the problems associated with defining the concept of social expenditure. It is necessary to estimate how well the definition adopted covers all of the social spending of a particular Member State. The ideal-type case would be one were all expenditure was subject to tax and would fall under the heading of social expenditure. Yet there are substantial differences between the individual countries. The Member States have organised the provision of social and health services in different ways. In many countries, social and health services are funded with insurance contributions and tax deductions. In some others, the services are funded and organised by municipalities, which employ the staff providing the services. Finally, there are countries in which health insurance or a significant part of the earnings-related pension insurance sys-

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[5] The Government of the United Kingdom traditionally funds its borrowing requirement by the sale of debt to private-sector investors, which imposes certain restrictions. Therefore, a separate protocol was drafted requiring the United Kingdom to "notify the Council whether it intends to move to the third stage before the Council makes its assessment under Article 121(2) of this Treaty". At the same time, the protocol states that "[u]nless the United Kingdom notifies the Council that it intends to move to the third stage, it shall be under no obligation to do so".

[6] The Danish Constitution contains certain provisions which may require Denmark to organise a referendum before committing to the third stage of Economic and Monetary Union. Therefore, according to section 2 of the protocol, "[i]n the event of a notification that Denmark will not participate in the third stage, Denmark shall have an exemption. The effect of the exemption shall be that all Articles and provisions of this Treaty and the Statute of the ESCB referring to a derogation shall be applicable to Denmark."

[7] Further, Portugal was "authorized to maintain the facility afforded to the Autonomous Regions of the Azores and Madeira to benefit from an interest-free credit facility".

tem is on a quasi-statutory basis but which still does not fall under the heading of social expenditure. Data on social expenditures where the different ways of providing social and health services are taken into account exist only for a few years and for only some of the countries under review. (Adema 2001.)

Following the completion of the third stage of Economic and Monetary Union, we can examine the main effects, from a social policy perspective, of the EMU process in the participating Member States. We can distinguish between changes which occurred in the transitional period (1990–1997) and those having occurred subsequently (1998–2003). The dividing line between these two periods is considered to be the Resolution of the Amsterdam European Council of June 1997 and the two subsequent regulations of July 1997[8], which established a permanent institutional framework not only for economic and monetary policy but also to some extent for social policy. It could be argued that the dividing line should be set at the beginning of the third stage of EMU, i.e. 1999, and there is even some justification to place it at the moment yet to come, at a point where all EMU countries truly fulfil the political commitments made in 1997 concerning the stability of the public finances and budget surpluses.

During the transitional period, most of EMU's impact arose from the convergence criteria. Behind these criteria was the view that economic and monetary union should encompass only Member States with similar economic structures. The convergence criteria set out in Articles 109j and 104c of the Maastricht Treaty (1993) were as follows[9]:

– Price stability, with rate of inflation not to exceed by more than 1.5 percentage points the average of the inflation rates of the three best performing Member States during the preceding year.

– The public deficit must not exceed the level of 3 percent of GDP.[10]

– The public debt must not exceed the level of 60 percent of GDP.[11]

– Stable exchange rates, with the currency of each Member States staying within the normal fluctuation margins during the preceding year. (ERM system.)

– Low interest rates, meaning that long-term interest rates may not exceed by more than two percent the average of the three Member States with the lowest rates of inflation.

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[8] Thus, the Stability and Growth Pact is comprised of a political declaration (the resolution of the European Council on the Stability and Growth Pact agreed on 17 June 1997) and two implementing regulations numbered 1466/97 and 1467/97.

[9] Protocol on the convergence criteria referred to in Article 121 (ex Article 109j) of the Treaty establishing the European Community.

[10] The ratio of the planned or actual government deficit to GDP must not exceed 3 percent.

[11] Normally in this connection the phrase "or it should converge to this value" is added. This is because – as we shall see – several of the Member States exceed the criterion concerning public debt.

The benchmarks used to assess progress on the convergence criteria and the deadlines for meeting them were specified further in a Protocol appended to the Maastricht Agreement (11/1993). The Agreement proper only outlined a number of broad principles. In addition to the core convergence criteria, changes in the ECU (the then unit of account), trade balances and the unit costs of labour were evaluated. However, these additional criteria did not have the same status or binding force as the aforementioned convergence criteria.

'Public finances' were defined in rather broad terms. According to Regulation 3605/93, they refer to central government, state government, local government and social security funds. The concept was thus defined by exclusion, being limited to the noncommercial operations referred to in the European system of national and regional accounts (ESA 95). Hence, the funds held in the Finnish earnings-related pension system, for example, which some place at the boundary between the public and private sectors, could be defined as part of the public finances. Such a broad definition was of particular importance to Finland also in that it allowed Finland, only just emerging from a severe economic recession, to meet the convergence criteria.

At its largest, the central government budget deficit was 11–12 percent of GDP in the early 1990s. Finland was able to meet the EMU deficit criterion in 1995 not only thanks to the shrinking of the deficit (which by 1996 was down to 7.4 percent of GDP) but also to the surplus of the social security funds (essentially the earnings-related pension funds). During this period, the local government finances were largely in balance, even if there were major differences between the individual municipalities. (The definition of central government debt did not take into account loans from the State Pension Fund to the central government budget.) This also provided clarity about the role of the social security funds affiliated with the earnings-related pension system as part of the public finances. The fact that public finances were defined so broadly had the additional benefit in Finland of encouraging analysts to look at public finances as a whole instead of analysing them sectorally as had been the case.

The realisation of the convergence criteria was monitored during 1993–2000 in a series of convergence reports. Particular attention was given to "borderline cases" and/or to the Member States remaining outside Economic and Monetary Union. Among the latter, Denmark and the United Kingdom were, as we noted above, exceptions, since they had and continue to have a negotiated right to remain outside EMU indefinitely. In 2000, the convergence reports focused exclusively on Sweden and Greece. The Swedish krona did not satisfy the criterion for currency stability, and the legislation governing the national central bank does not conform to the provisions of Economic and Monetary Union. However, Sweden would have been accepted for membership in EMU had it so desired. The Greek convergence process was followed quite closely and its accession to EMU was genuinely dependent on its meeting the convergence criteria. As we will see below, Greece managed to accede to EMU with the help of some

creative accounting. Thanks to its creative approach, Greece has enjoyed a significant benefit from EMU in the form of lower interest rates.

In the third stage of EMU, the Member States which adopted a common currency turned their attention from convergence programmes to stability programmes.[12] They are defined in Article 3(1) of Council Regulation No. 1466/97, "1. Each participating Member State shall submit to the Council and Commission information necessary for the purpose of multilateral surveillance at regular intervals under Article 103 of the Treaty in the form of a stability programme, which provides an essential basis for price stability and for strong sustainable growth conducive to employment creation." The Article 103 referred to here is as follows:

1. The Community shall not be liable for or assume the commitments of central governments, regional, local or other public authorities, other bodies governed by public law, or public undertakings of any Member State, without prejudice to mutual financial guarantees for the joint execution of a specific project. A Member State shall not be liable for or assume the commitments of central governments, regional, local or other public authorities, other bodies governed by public law, or public undertakings of another Member State, without prejudice to mutual financial guarantees for the joint execution of a specific project.

2. If necessary, the Council, acting in accordance with the procedure referred to in Article 252, may specify definitions for the application of the prohibition referred to in Article 101 and in this Article.

The goal, then, is to reinforce the mutual surveillance of Member States by creating transparent operational models.

The fulfilment of the convergence criteria has been analysed in detail in several studies and will not be explored here. By the end of 1997, the Member States had converged on the agreed criteria particularly in the area of monetary policy (interest rates and currency value). The only exceptions were Greece and the United Kingdom. Only a few of the Member States (including Finland, Luxembourg and the United Kingdom) had unambiguously met the financial policy targets of EMU regarding the public-sector deficit and the reduction of public debt. (Widgren 2001, 253.)

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[12] Along with the stability programmes, the economic policy of the Member States is coordinated by means of defining broad lines of policy to be pursued by the Member States. The legislative basis for this approach is provided by Articles 98 and 99 of the Treaty establishing the European Community. Their underlying premise is the idea of economic policy as a common interest of the Member States requiring the coordination of their economic policies. The economic policy pursued in the period under review has also been impacted by the European Employment Strategy (1997–), which is to be harmonised with the broad lines of economic policy and the Cardiff process (1998–), which deals with the structural challenges faced by Europe. (For details see Kajaste 1999.)

Despite these problems the Member States decided in 1998 to proceed towards the third stage. Initially, the following Member States remained outside the scope of EMU: Greece (against its will); Sweden (by its own choice); and Denmark and the United Kingdom (by virtue of an opt-out right and by reference to political factors and the economic situation). Greece joined EMU in 2001. In Sweden, membership in EMU was rejected in a referendum held in September 2003 by a clear margin, with 56.1 percent voting against and 41.8 percent for joining EMU. The turnout was 81.2 percent. Following this result, Denmark and the United Kingdom postponed any decision concerning membership in EMU. Both have decided to hold a referendum on membership in EMU.

Even as late as the beginning of the third stage of Economic and Monetary Union, not all of the eleven countries which had been accepted for membership unequivocally fulfilled all of the provisions of the convergence criteria. The public debt criterion was especially problematic. "Convergence towards" the 60 percent target was defined as a satisfactory result. However, the countries that exceeded the EMU criteria did converge on them both in terms of deficits and public debt. Finland fulfilled the criteria soon after the mid-1990s, but the Finnish markka was not pegged to the ERM until October 1996. Like Italy, then, Finland had strictly speaking not yet completed the required two-year period of participation in the ERM when the decision about the countries accepted for membership in EMU was made in May 1998. As regards the public finances, it was required that the debt-to-GDP ratio should be under 60 percent or, alternatively, that it was making steady progress towards that level. This qualification was essential, because many important Member States, including Italy and Belgium, are well above the 60 percent level.

2.2 The Stability and Growth Pact

The Stability and Growth Pact of the European Union, which was adopted at the Amsterdam summit in 1997, defined these concepts further. It itself is defined in Council Regulations 1466/97 and 1467/97. Under the Pact, a Member State participating in EMU will be subject to sanctions if its public-sector deficit is of a structural nature ("excessive") and no appropriate steps are taken within a period of 10 months to rectify the situation. (An excessive deficit, in other words, need not be a structural deficit. An excessive deficit that remains within acceptable bounds may result from incidental factors that raise expenditures.) With the help of these measures, public finances must reach a balance or a surplus.

The Regulation provides for the following types of sanction: the publication of information by a Member State before the issuance of bonds; the imposition of restrictive loan terms by the European Investment Bank; and the payment of compulsory interest-free deposits. Such a deposit would be equivalent to 0.2 percent of GDP and one-tenth of 3 percent of the margin between the maximum acceptable deficit of 3 percent

and the actual deficit. The maximum amount of the deposit is 0.5 percent of GDP. Unless a Member State institutes measures designed to stabilise the public finances, the deposits turn into fines. The Council will revoke the decision as soon as the excessive deficit has been rectified. To date, things have never proceeded this far. In the event of a recession, certain exceptional measures will be undertaken. If GDP declines by 0.75 percent or more, the sanctions are discretionary. If the decline is between 0.75 and 2.0 percent, the Council of the European Union can grant the right to deviate from the Pact. The Council will consider the "exceptionality" of the situation with regard to the speed of the change or to previous national "experience". If GDP declines by 2 percent or more, the right to deviate from the Pact without fear of sanction is granted automatically.

Article 104

1. Member States shall avoid excessive government deficits.

2. The Commission shall monitor the development of the budgetary situation and of the stock of government debt in the Member States with a view to identifying gross errors. In particular it shall examine compliance with budgetary discipline on the basis of the following two criteria:
a) whether the ratio of the planned or actual government deficit to gross domestic product exceeds a reference value, unless:
– either the ratio has declined substantially and continuously and reached a level that comes close to the reference value;
– or, alternatively, the excess over the reference value is only exceptional and temporary and the ratio remains close to the reference value;
b) whether the ratio of government debt to gross domestic product exceeds a reference value, unless the ratio is sufficiently diminishing and approaching the reference value at a satisfactory pace. The reference values are specified in the Protocol on the excessive deficit procedure annexed to this Treaty.

3. If a Member State does not fulfil the requirements under one or both of these criteria, the Commission shall prepare a report. The report of the Commission shall also take into account whether the government deficit exceeds government investment expenditure and take into account all other relevant factors, including the medium-term economic and budgetary position of the Member State.

4. The Committee provided for in Article 114 shall formulate an opinion on the report of the Commission.

5. If the Commission considers that an excessive deficit in a Member State exists or may occur, the Commission shall address an opinion to the Council.

6. The Council shall, acting by a qualified majority on a recommendation from the Commission, and having considered any observations which the Member State concerned may wish to make, decide after an overall assessment whether an excessive deficit exists.

7. Where the existence of an excessive deficit is decided according to paragraph 6, the Council shall make recommendations to the Member State concerned with a view to bringing that situation to an end within a given period. Subject to the provisions of paragraph 8, these recommendations shall not be made public.

8. Where it establishes that there has been no effective action in response to its recommendations within the period laid down, the Council may make its recommendations public.

9. If a Member State persists in failing to put into practice the recommendations of the Council, the Council may decide to give notice to the Member State to take, within a specified time-limit, measures for the deficit reduction which is judged necessary by the Council in order to remedy the situation.
In such a case, the Council may request the Member State concerned to submit reports in accordance with a specific timetable in order to examine the adjustment efforts of that Member State.

10. The rights to bring actions provided for in Articles 226 and 227 may not be exercised within the framework of paragraphs 1 to 9 of this Article.

11. As long as a Member State fails to comply with a decision taken in accordance with paragraph 9, the Council may decide to apply or, as the case may be, intensify one or more of the following measures:
– to require the Member State concerned to publish additional information, to be specified by the Council, before issuing bonds and securities;
– to invite the European Investment Bank to reconsider its lending policy towards the Member State concerned;
– to require the Member State concerned to make a non-interest bearing deposit of an appropriate size with the Community until the excessive deficit has, in the view of the Council, been corrected;
– to impose fines of an appropriate size.
The President of the Council shall inform the European Parliament of the decisions taken.

12. The Council shall abrogate some or all of its decisions referred to in paragraphs 6 to 9 and 11 to the extent that the excessive deficit in the Member State concerned has, in the view of the Council, been corrected. If the Council has previously made public recommendations, it shall, as soon as the decision under paragraph 8 has been abrogated, make a public statement that an excessive deficit in the Member State concerned no longer exists.

13. When taking the decisions referred to in paragraphs 7 to 9, 11 and 12, the Council shall act on a recommendation from the Commission by a majority of two thirds of the votes of its members weighted in accordance with Article 205(2), excluding the votes of the representative of the Member State concerned.

14. Further provisions relating to the implementation of the procedure described in this Article are set out in the Protocol on the excessive deficit procedure annexed to this Treaty. The Council shall, acting unanimously on a proposal from the Commission and after con-

sulting the European Parliament and the ECB, adopt the appropriate provisions which shall then replace the said Protocol.

Subject to the other provisions of this paragraph, the Council shall, before 1 January 1994, acting by a qualified majority on a proposal from the Commission and after consulting the European Parliament, lay down detailed rules and definitions for the application of the provisions of the said Protocol.

The functioning of EMU has subsequently (from 1999 onwards) been monitored by means of stability programmes (Article 4 of Council Regulation 1466/97). Such programmes are drawn up by all of the euro-zone Member States. Other Member States prepare a convergence programme, the aim of which is to adjust the public finances to the parameters set in the Stability and Growth Pact. "A Member State adopting the single currency at a later stage shall submit a stability programme within six months of the Council Decision on its participation in the single currency."

In the money markets, the impact of EMU has been seen in a rapid downward convergence of long-term interest rates. From 1997 onwards, the rates have decreased and converged to a historically low level. This has significantly reduced the ratio of public debt service costs to GDP in the EMU countries. For example in Italy and Belgium, the change in a positive direction has been dramatic. Also for Finland, the change has been positive.

This is probably the greatest impact that Economic and Monetary Union so far has had on the functioning of highly indebted national economies. In evaluating its relative importance for the individual Member States, we must take into account the fact that interest rates have dropped quite rapidly also in non-EMU countries, including Japan and the United States. The decrease in interest rates in the EMU countries may also reflect a more general change of economic and monetary policy or a changed situation in the money markets. Yet, it is relevant to examine interest rates because real interest rates, which are sensitive to inflation, have a significant effect on the national economy. Deviation from the strict economic policy dictated by EMU lowers real interest rates and increases the accumulation of debt, which are unfair to the other countries. Through a crowding-out effect, this may result in an increase in interest rates. In view of this, the inflation criterion for EMU membership, being related to the management of government finances, assumes particular relevance. (For long-term real and nominal rates of interest, see Appendix figures 3 and 4.)

The direct effects of the Economic and Monetary Union on social expenditure are more difficult to gauge. The convergence criteria do not relate specifically to social expenditure but to government spending in general, of which social expenditure is, admittedly, an important part. Moreover, the criteria are such that even non-EMU countries strive to apply them in their economic policies. Hence, in considering the impact of the EMU criteria, we should perhaps look beyond the EMU participant

states. In this study, we shall approach this issue by examining the way in which the share of social expenditure and other expenditures in public spending has changed in Member States with differing debt loads. With respect to public debt, the EMU participant states have committed themselves to bringing down the debt level to 60 percent of GDP. No such sanctions as attach to the public deficit provisions of EMU are associated with this target. Even though this study focuses on public indebtedness and the attendant interest obligations, we shall also look at the crowding-out effect of social expenditure from the point of view of public deficits. This approach is in line with the objectives defined in the Economic and Monetary Union and the Stability and Growth Pact.

2.3 Economic and Monetary Union, social policy and Finland – framing the policy

In the foregoing, we touched briefly upon the impact that Economic and Monetary Union has had on Finland. In the second half of the 1990s, there was some uncertainty in Finland about how strongly Finland had, by joining the European Union in 1995, committed itself to participating in the third stage of EMU. In fact, there should have been no confusion because Finland had not expressed any reservations about this issue on joining the EU, unlike Sweden and the United Kingdom, which had participated in negotiations on the Maastricht Treaty.

Therefore, right from the beginning of the accession negotiations, Finland took steps to modify and reform government finances in line with the EMU provisions. This approach became increasingly clear in the subsequent years. The 1995 state budget includes a section titled "The Finnish Economy and EU Membership", in which these framework conditions are spelled out. Similar views were expressed also by the programme manifesto of the Lipponen government (1995–1999). The chapter on EU policy says the following (emphasis added):

> The aim of the economic policy of the Government is to have Finland fulfil the criteria of the Economic and Monetary Union of the European Union, so that Finland will be able, should it be so decided, to participate in the third stage of Economic and Monetary Union at its inception. *The participation will be decided in Parliament on the basis of a separate proposal from the Government.*

Finland also prepared its first convergence programme in the summer of 1995.

The wording of the Government programme reflects the fact that on passing the bill proposing Finland's membership in the EU, Parliament in 1994 required that the Government should submit to Parliament's decision the question of Finland's possible participation in the third stage of Economic and Monetary Union. The reference to "Parliament's decision" was interpreted in various ways, including in the Commit-

tee for Constitutional Law, which considered both an official report by the Government and a law proposal as possible ways of satisfying the Parliament's requirement. (Awareness of the fact that Sweden, which also had not expressed reservations about EMU on joining the European Union, did not intend to hurry its membership in EMU, cast a shadow over the decision-making.)

In the end, the Government issued a report and a notification on Economic and Monetary Union. Titled *Economic and Monetary Union – Finland's alternatives and national decision-making* and based on the views of an expert working group, the report was submitted to Parliament at the end of 1997. It focused primarily on questions not involving social policy. The report concluded that the increased economic growth which EMU was likely to engender would promote the sustainable funding of social provision. The effects are mainly of an indirect nature. The principal message of the report was that "over a longer term, participation in the euro zone can optimally promote growth and thereby allow the further development of social policy systems". According to the report, national decision-making powers would not be diluted, even if "the transition could give an impetus to the convergence of national social policy systems, increased cooperation and the definition of social rights at the EU level". The report concluded with the following statement:

> Adjustment to economic changes in the international context may have an indirect impact on the conditions for social policy. Social policy decision-making must balance the demands of economic efficiency and social justice. The Government stresses that the impact of Economic and Monetary Union and other integration decisions on social conditions and equality must be evaluated. This must include a study of the methods by which any negative effects can be diminished.

These effects were analysed from a variety of perspectives in the autumn of 1997 – usually by appending a section on the EMU dimension to ongoing studies. The tight schedule did not allow a more systematic approach.

Based on the results of these studies, the Government's notification to Parliament on Finland's participation in the euro zone, issued in late February 1998, arrived at the following conclusion about the linkages between social policy and European and Monetary Union:

> For some time, our own objectives in the area of economic policy have been in line with these agreements, and therefore they would not impose restrictions on Finland but instead offer a guarantee that all of the euro-zone countries will commit with us to the same stability targets. EMU is not a threat to the Nordic Welfare State, to the social security system, or to regional development. The objectives which we set ourselves in these areas can best

be achieved under circumstances of favourable economic growth, which participation in the euro zone will do its share to promote.

The message was clear. The future of Finnish social policy would be linked to the growth enabled by European integration, one of the framework conditions for which was the stability provided by Economic and Monetary Union.

The greatest challenges involved keeping the rise in labour costs under control and dealing with the asymmetrical shocks caused by the different timing of economic cycles within Economic and Monetary Union. This would be the case, for example, if European monetary policy were to be adjusted to the needs of Central Europe assumed to be on the downward slope of the economic cycle, leading to the overheating in Finland, assumed here to be on the upward slope of the economic cycle. Vice versa, the presence of strong economic growth in Central Europe and the application of an interest rate policy designed to keep growth under control could lead to deeper economic recession in Finland. Such thinking subsequently led to the creation of counter-cyclical buffer funds for the unemployment insurance and earnings-related pension insurance systems. They are stocked up during times of favourable economic growth and drawn down during severe recessions. (See Saari 2003.) Experiences from the first years of the 21st century, when Finland went through a modest asymmetrical shock, prove that the strategy then adopted works.

EMU was generally viewed in positive terms. Ilkka Kajaste, former head of the Economic Policy Unit in the Finnish Ministry of Finance, summarised the social policy impact of Economic and Monetary Union in the following three statements (2002, 168–169). (Our summaries are based on a wider selection of material.)

– The goals of Economic and Monetary Union – a stable economic environment and sustainable economic growth – are a good fit with social policy objectives, because they make it imperative to expedite steps to put the public finances on a solid footing.

– Economic and Monetary Union will refocus economic policy towards structural and medium-term challenges motivating us to strengthen economic performance and to improve the outlook for growth. With structural challenges, the reference is to long-term unemployment, and with medium-term challenges, to demographic ageing.

– Economic and Monetary Union requires coordination between economic policy-makers, because monetary policy is centralised and decisions concerning fiscal policy will continue to be made nationally.

Based on these three arguments, Kajaste emphasises that "since there is no coordination, at the EU level, of the substance of budget policy, there is also no need to broaden

the Community's competence or coordination authority to encompass social policy" (Kajaste 2002, 169). At the same time, the three arguments are directly linked to the social policies of the individual Member States. In certain situations, the first argument could translate into a policy of, over the short term, limiting the growth (or possibly making cuts) in social expenditure in the interest of ensuring long-term sustainability. The second argument means an evaluation of the internal structure of social expenditure taking into account the challenges of ageing. The third argument, by requiring coordination in economic policy, also requires, in practice, coordination in social policy, because economic policy (specifically fiscal policy) is necessarily also social policy given the large share of GDP which social expenditure represents. Thus we can highlight the linkages between social policy and Economic and Monetary Union.

2.4 Previous research

When Economic and Monetary Union was being sketched out in the 1990s, especially in the second half of that decade, much attention was given to the analysis of the social policy impact of the proposed Union. This is no surprise if we consider the expressed objectives of EMU. One of them was to create framework conditions for the public finances of the Member States which, first, would support monetary and economic policy aimed at price stability; second, would create necessary room for manoeuvre for counter-cyclical policies; and third, by reducing public indebtedness, would help the public finances adjust to population ageing in the 21st century. Additional objectives included the protection of Member States against speculative attacks on exchange rates and the promotion of European integration especially by improving the functioning of the internal market.

Particularly in 1997, a year in which many Member States took political decisions about committing to an "irreversible" course towards Economic and Monetary Union, the potential effects of EMU were examined from a variety of perspectives. One of the questions addressed was the future of the collective bargaining system and of the public finances within Economic and Monetary Union. Much attention focused on how the forthcoming introduction of the euro would increase the four freedoms of movement in the internal market (the free movement of capital, goods, services and labour). Increased transparency and the substantial reduction of transaction costs (including currency exchange costs) were seen to impose new framework conditions on the ability of the Member States to levy taxes and to increase the demand for social security as a result of migration, which was seen as being motivated by the availability of social security benefits and thus exerting pressures on the public finances. Some also voiced concerns over the extent to which the differences between the Member States – both institutional ones and those relating to the level of public spending – could be maintained under a common monetary policy. All in all, Eco-

nomic and Monetary Union was feared (and hoped) to bring the Member States closer to each other. (Sinn 1998; Pochet and Vanhercke 1999.)

The debate among social policy-makers in Finland about the impact of EMU has subsided since 1997 and 1998, as it has elsewhere in Europe. *The Journal of European Social Policy*, for instance, the foremost journal of social policy research on the European Union, has not carried any articles on this topic for years. To some extent this may be due to the diversion of research interest to various questions related to the implementation of the internal market and the Lisbon Strategy. Another partial explanation may be that the transition to Economic and Monetary Union was, in the end, rather slow, and that the most pessimistic scenarios about EMU's impact on social policy have not been realised. Also, Finland took steps to set up necessary buffer funds for earnings-related unemployment security and pension systems, which lessened political interest in EMU.

The reduced interest among researchers and politicians is somewhat paradoxical given that the effect of Economic and Monetary Union on economic growth has not been as expected. With regard to its effect on the national economy, EMU has been characterised as increasing the productivity of the national economy by eliminating barriers to trade and by boosting competition. In addition, EMU is assumed to reduce real interest rates relative to non-EMU countries. Also tax competition is assumed to intensify. The net effect of these factors is uncertain and very difficult to gauge empirically. Some have argued that EMU could have a slight expansive effect and a positive impact on employment. (See Alho and Kaseva 1999, 36–37.) Whether these effects have been realised remains unclear.

The convergence of the long-term real interest rates of the Member States has also been slower than expected. While convergence has, as expected, occurred in nominal rates of interest, due to the possibly slack fiscal policy of some Member States, the rate of inflation varies from one country to another to such a degree that the dispersion of real long-term interest rates has failed to decrease appreciably after the mid-1990s. Both nominal and real rates of interest have, on average, decreased noticeably. (See Appendix figures 4 and 5.) In the labour market, the expected widespread adoption of more centralised (or decentralised) models of wage formation has not occurred. Another fact that may be indicative of underlying problematic issues with EMU is that both Britons and Swedes have expressed reservations about EMU membership. This is understandable from the standpoint that both the United Kingdom and Sweden have, at least so far, enjoyed comparatively good economic growth. To summarise, then, the promises and dangers of Economic and Monetary Union in terms of economic and labour market policy have not been realised. (European Commission 2004b; Hein and Truger 2005.)

Results such as this point up the need to re-evaluate the social policy impact of Economic and Monetary Union. Moreover, when one considers the difficulties faced by

the Member States in the first few years of the current century in meeting the fiscal objectives of the Economic and Monetary Union, one might expect researchers to show more interest in this institutional structure. Another notable fact with particular relevance for research is that any social policy impact of Economic and Monetary Union and of the Stability and Growth Pact can be empirically evaluated only now that the convergence process of 1993–1999 is over and the Member States have adopted – or at least should have adopted – common European standards in their economic policies. Further, time series are by now extensive enough to allow us to assess the impact of EMU.

3 CROWDING OUT: A MULTIDIMENSIONAL CONCEPT

One of the central themes of this research is the question whether high public indebtedness has resulted in a crowding-out effect whereby changes in the cost of debt management have diverted available additional resources to other purposes than social expenditure. The question, then, is one of crowding out in the structure of public expenditure. An attempt will be made to test this hypothesis by statistical means. First, we must review the concept of crowding out from a variety of perspectives. This concept has a long history in macroeconomics and economic discourse. Today, crowding out is used to refer to the effect of fiscal policy choices on the growth potential of national economies. However, crowding out can have several different meanings depending on the perspective used, for the concept itself is a multidimensional one.[13]

Taken at its broadest, crowding out can refer to all of the means and channels whereby an expansive fiscal policy financed by debt can have a small positive influence, no influence or even a negative influence on output. The basic premise is that of an increase in public consumption boosting total demand and contributing to higher income and production (Alho and Kaseva 1999; Begg et al. 2000; Stiglitz 2000). When income formation and, consequently, the demand for money increase while the supply of money remains flat, the result is an increase in the rate of interest. This in turn will have a dampening effect on investments and consumer demand which together will decrease total demand to the extent that an equilibrium corresponding to the original increase in the total demand cannot be attained, but rather the expansive effect of the increase in public expenditure will be partially eliminated and there will be a reversion to a lower level of equilibrium income.

Several different criteria have been used to characterise the concept of crowding out. Often, the focus is divided between short and long-term effects on the one hand and direct and indirect effects on the other. The so-called neo-Keynesian literature focused primarily on short-term effects. Research of direct crowding-out effects has been largely based on coefficients where private-sector activity is the numerator and public-sector procedure the denominator. The coefficients describe the effect that a procedure carried out in the public-sector has on activity in the private-sector. The economic discourse on the crowding-out effect has revolved largely around the sign and magnitude of the fiscal policy coefficients. Where the coefficient is positive but smaller than 1, we have a short-term partial crowding-out effect. The analysis of direct crowding-out effects has dealt with such dimensions as income, assets, consumption, investment and assumption of debt. (Buiter 1977.)

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[13] One source which provides a concise introduction to the concept of crowding out in economics and its dynamic effects in circumstances of full employment or underemployment as well as its relationship with the funding of public debt and with public consumption is *The New Palgrave, A Dictionary of Economics, 1998, 728–730.* For an analysis of crowding-out effect of public debt and deficits within a global framework, see Obstfeld and Rogoff 1996, 169–171.)

One example of direct crowding out is a case where an expansion of the public economy crowds out private-sector employment, with increased demand for labour in the public sector raising real wages, which in turn decreases the demand for labour in the private sector. As a consequence, the increase in employment would not be fully translated into increase in overall employment. Indirect crowding out, by comparison, occurs when an instrument wielded by the government exerts an effect on prices and interest rates, which in turn results in substitution between the public and private sectors. (See e.g. Heidra and Lighthard [1997], where direct crowding-out effects are combined with a macroeconomic model analysis, and Ganelli [2003], where the crowding-out effect of public consumption is examined within a dynamic open economy model.)

In the social sciences, the crowding-out concept has been used less. Its most common application in the social sciences concerns the degree by which government income transfers and services crowd out private activity and decrease altruism in society. This is a controversial and ideologically coloured question for which there are so far no reliable empirical answers. The challenge is how to define commensurate standards for national social security systems with a volume of billions of euros and charitable campaigns encompassing millions of euros (see e.g. Kangas and Saari 2000). A more recent area of research where the concept of crowding out plays a central role is the one of concrete welfare state research. It deals with the welfare state as an institution and examines whether the welfare state crowds out so-called social capital, which manifests itself in networking, trust and norms. (See van Oorschot and Arts 2004.)

This study takes a somewhat different approach. Here, we focus not so much on the effect that government activities have on the private sector or on the effect of institutions, but rather on crowding out within the structure of public expenditure. Our multi-country comparative approach limits our ability to delve deep into the specifics of individual Member States. We look at public expenditure from the perspective of the indebtedness of the Member States. Given that one of the key objectives of Economic and Monetary Union and the Stability and Growth Pact is, besides the limiting of public deficits, the reduction of indebtedness, it will be necessary, in this study, to classify public expenditures by a method which in a way allows us to analyse the connections between changes in indebtedness and in the structure of public spending. Since limiting the accumulation of debt is the objective of any rational fiscal policy, membership in the Economic and Monetary Union may not be the sole reason why countries choose to pursue such economic policies, for similar choices are of course made also by non-EMU countries.

There exists extensive research on public expenditures, based usually on time series data on government accounts. In recent years, focus has shifted increasingly to the analysis of the structure of public spending from a social policy perspective. This is partly due to the difficulty of classifying public expenditures in a manner that would be sufficiently relevant for social policy purposes. New data sets where public expen-

ditures would be classified on a functional basis are not generally available. In a European Commission survey of public finance in EMU (European Commission 2004a), public expenditures are divided into ten categories. The purpose of this classification is to highlight the qualitative features of public expenditures. This seeks to clarify the way in which elements of the public finances which promote productivity and growth have evolved. However, that data does not cover all of the Member States, and for some states data is only available from 1995 onwards. For the purposes of statistical analyses, the time series are still rather short.

For the first, public expenditures are categorised into items of expenditure which are considered contributory to economic growth by influencing positively the marginal productivity of capital and labour. One example of such expenditure items are public investments in infrastructure, including investments in road and communications infrastructures, in training, in research and development, or in health care. They are referred to as productive expenditures. Non-productive expenditures include those whose effect on marginal productivity is not considered to be positive, such as social expenditures and interest expenditures. This distinction between productive and non-productive expenditures is somewhat arbitrary, because social expenditure, for instance, can be a productive item of expenditure when its outcome is an insurance unobtainable in the private sector due to the well-known dilemma of asymmetrical information.

Data about the structure of public spending that would both be relevant to our research objective and have a sufficient level of specificity are not readily available or, for the new Member States, do not exist at all. In the ESA 95 data, total public expenditure is broken down into seven main categories but not analysed in any more detail. The functional COFOG classification comprises 10 main categories, which can be divided into subcategories. Both these classifications have problems: with the first, the problem is the impossibility of itemising the commodities produced by the public authorities, while the second covers about a half of the Member States starting from the early 1990s and the rest from 1995.

Because of these shortcomings, we have decided to use the so-called residual method to classify expenditures. This means that where there is data on the total expenditure and a certain share of the component expenditures included in it, whatever item of expenditure remains is equal to the difference between the two. This method has been used by Francis Castles (2006, 21–25), a British researcher on social expenditures. He looks at three main aggregates of public expenditure: total expenditure, social expenditure and a residual share, which he calls the core expenditure of general government. The core expenditure is derived by deducting social expenditure from total government expenditure. However, this classification does not allow us to estimate how the development of public indebtedness has affected the evolution of the share of social expenditure in total government expenditure, since debt service is included

in the core expenditure. Therefore, we shall use the following approach to classify public expenditures.

We start from the general government total outlays of 15 EU Member States. They are derived from OECD statistics. The time series used represent the general government total outlays as a share of GDP. The data on social expenditure are from the Eurostat ESSPROS classification, where social expenditures are adjusted to GDP.[14] As the variables are linked to GDP, we should bear in mind that changes in ratio can result from changes in either the numerator or the denominator. (Changes in GDP are presented in Appendix figure 3.) General government net debt interest payments are from a publication by the European Commission (2003), where they are adjusted to GDP. The proportion of GDP accounted for by the core expenditure of general government has been calculated by reference to the respective shares of GDP of total expenditure, social expenditure and interest payments. The GDP shares allow us to calculate the share of these three expenditure items in the general government total outlays.

Table 1. *Expenditure categories and the residual method.*

General government total outlays
Primary expenditures:
– Social expenditure
– Core government expenditure
General government net debt interest payments
General government total outlays = social expenditure + core government expenditure + general government net debt interest payments
Core government expenditure = general government total outlays – social expenditure – general government net debt interest payments

The selection of variables is not straightforward, but depends to a great deal on what one intends to study. This *dependent variable problem* is a pervasive problem in welfare state research. One of the perspectives from which social expenditures can be studied is the way they reflect the development of the welfare state in general. A commonly used aggregate indicator is the ratio of social expenditures to GDP. As indicators, we can use either static levels or rates of growth. However, the challenge is that it is often difficult to discern whether changes result from the implementation of specific social policies or from exogenous factors. Institutional changes resulting in wel-

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[14] In the ESSPROS (European System of Integrated Social Protection Statistics) classification, social expenditure is defined as social provision consisting of the expenses incurred by households and individuals in respect of the following eight risks: sickness and health, disability, old age, death of a breadwinner, family and children, unemployment, housing and social exclusion.

fare retrenchment show up in the aggregate indicator as increases in social expenditure in the event that there is a simultaneous substantial increase in the number of welfare recipients. The generosity of social security systems – the quality of services, the level of income transfers and the coverage of the systems – can be evaluated by adjusting the indicator to population size or the number of recipients. This and the preceding approach differ in terms of their empirical results. A third method is to use an index formulated on the basis of the generosity of the individual welfare subsystems. Finally, a fourth approach is to portray the generosity of the systems by reference to the breadth of coverage and rates of compensation they provide.

We should mention one additional factor related to the definition of the concept of social expenditure which is relevant to the interpretation of the results. Namely, this study uses the concept of gross social expenditure, which does not encompass voluntary private social expenditures or the effect of the tax system on social expenditures. Depending on the country, benefits may or may not be considered as taxable income. There exist also a number of tax expenditure schemes which have an impact on the amount of so-called net social expenditure in various countries. Also, the indirect tax included in the cost of social services and equivalent may vary from one country to another. It has been discovered that basing comparisons on the concept of net social expenditure changes the picture with regard to cross-country differences and the ranking of countries according to the GDP share of social expenditure. (See Adema and Ladaique 2005.) In this study, application of the net social expenditure concept is hampered primarily by the fact that data about net social expenditures are only available for limited time periods, and suitable time series data are not yet available.

None of the methodological approaches mentioned above have produced strong empirical evidence supporting the race-to-the-bottom hypothesis, which argues that globalisation will lead to a contraction of the welfare state. The share of social expenditure in GDP – the measure used in this study – has been recommended by some writers as an alternative to the abovementioned indicators (see Kühner 2005). Our indicator is, then, not perfect, but as is often the case in this imperfect world, it is among the best and most reliable indicators available.

One alternative approach to the study of the structure of the public finances would be to distinguish, among public expenditures, between consumption expenditures and investment expenditures. This would make it possible to estimate the effect of public indebtedness on specific expenditure items, assuming the application of the golden rule, whereby public debt capital is used to fund growth-promoting investments. However, we were unable to differentiate between consumption expenditures and public investments, and hence to analyse the allocation of public debt on that basis. This is because both social expenditures and other expenditures in our data include both consumption and investment expenditures. Therefore, by limiting our focus to the distinction between consumption and investment, we would forgo the social policy perspective – an integral element of this study. Trade-off choices cannot be avoided.

With both social expenditures and general government expenditures being comprised both of consumption and investment expenditures, debt service costs act as a kind of proxy variable when it comes to estimating the effect of public debt reduction on the expenditure structure. In this sense, the debt service costs on public debt impact on the room for manoeuvre for both social expenditure and other government expenditure. The distinction drawn in this study is a rough one and points up the need for a more detailed categorisation of budget items as a possible subject for further study.

The classification of public expenditures into three groups, as is done in this study, is not a satisfactory method when attempting to analyse the impact of government decision-making. This would require a classification that is both more fine-grained and more appropriate to the purpose. Due to lack of data, this was, as of now, impossible to accomplish, so to this extent we will have to wait for more detailed international data on public expenditures to become available. The same is true for the period surveyed, which does not allow us to draw strong statistical conclusions. At the same time, intermittent changes in the systems make long time series less practical. Also, year-to-year observations about the functioning of the Economic and Monetary Union are, as of yet, rather few and far between. These problems represent a challenge for further research.

4 VARIABLES AND METHODS

Analysis of the crowding-out hypothesis requires an empirical research approach. In this and the following two chapters, we will define the variables used in this study, and create a number of statistical models for the estimation of the effects of EMU. After a general analysis, we will move on to a closer examination of different time periods. In conclusion, we look at groups of countries arranged according to criteria in the Stability and Growth Pact that are relevant to social policy. At first, we will present the evolution of public debt and public deficit in the individual countries during the period under review. This will establish a framework for the evolution of public expenditures, which are at the core of this study and which also will be examined separately for each country. For the purpose of statistical analysis, we will then describe the variables used to explain changes in different public expenditures. This will culminate in a presentation of the statistical models used in chapter 5. Following a concise methodological overview, we will present the estimation results. The study period will then be divided into three. In logical progression, we will analyse crowding-out effects in the groups of countries identified in the course of the study period. The empirical section will conclude with a summary of the crowding-out effects observed in the different groups of countries.

4.1 The constraints imposed by the Stability and Growth Pact and the ratio of social expenditures to GDP

A central factor investigated in this study is the ratio of social expenditure to general government outlays, as defined earlier. The behaviour of this variable is analysed especially with regard to the evolution of the public debt-to-GDP ratio and the public deficit during the study period. As we noted above, both indebtedness and fiscal deficits are subject to constraints imposed by the Stability and Growth Pact. Figure 1 shows the public debt level of 15 Member States as a share of GDP in 1990–2005, while Figure 2 presents the GDP share of the public deficits of these countries over the corresponding period.

A line has been drawn across Figure 1 to represent the '60 percent of GDP' limit imposed by the EMU convergence criteria and the Stability and Growth Pact. Similarly, Figure 2 features a line which stands for the 3 percent deficit limit. Based on these two figures, it is difficult to tell what effect the convergence criteria have had on public debt. The general decline in indebtedness following the recession of the early 1990s could be attributable also to economic growth (see Appendix figure 3) or to changes in the level of interest rates.

Interest rates declined from the early 1990s to the early 2000s. However, this happened in both EMU and non-EMU countries, which makes it difficult to estimate the effect of EMU. This development may have been due to changes in the supply of

money rather than demand. However, changes in prices varied between individual countries throughout this period, and thus the spread of real interest rates across the countries decreased surprisingly little despite the convergence of the nominal interest rate. (See Appendix figures 4 and 5.) (The EU and EMU criteria and the development of national economies have been examined, from a variety of perspectives, by such authors as Kiander and Lönnqvist [2002], Hagfors [2004], Romppanen [2004], Kiander and Romppanen [2005] and Kiander [2005]. The long-term effect of EMU on social security has been studied by Alho and Kaseva [1999].)

EU countries are divided into a number of distinct groups with respect to public indebtedness. In Figure 1, we can see clearly the countries exceeding the public debt criterion. The highest levels of indebtedness are seen in Belgium, Italy and Greece, which failed to meet the EMU convergence criteria by 1997. While a decreasing trend in indebtedness can be perceived in Belgium and Italy, Greece clearly failed this criterion on its accession to EMU. Leaving Luxembourg out of the comparison, we see that the other EU countries have reduced their public debt to either below or near the criterion. The most rapid decrease in debt was achieved by Ireland, Spain and Denmark.

Figure 1. *General government consolidated gross debt: Ratio to GDP (%) in 15 EU Member States, 1990-2005.*
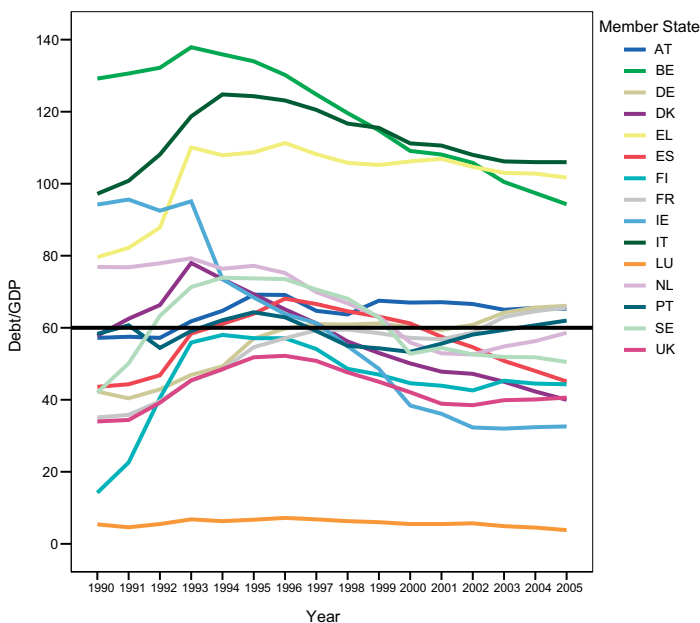
Source: European Commission 2004b, Table 77.

Figure 2 shows that public finances were generally in deficit during the recession of the early 1990s. With strong economic growth and following cuts in public spending, the deficits began to decrease. By 1997, most EU countries met the 3 percent deficit criterion. After the turn of the millennium, the positive trend has stagnated, with especially the larger EU countries such as France, Germany and Italy struggling to balance their finances. A similar situation can be seen in Greece and Portugal. In 1993, Finland fell far short of the fiscal deficit criterion. However, by 1997 the deficit had diminished from 7 percent to 3 percent. In the 2000s, Finland has run a substantial fiscal surplus. A similar development can be observed in Denmark. Sweden and the United Kingdom, in particular, were able to shrink their fiscal deficits after 1993. Thus, we cannot draw conclusions about the effects of the EMU criteria on the balance in public finances from this perspective either. Greater financial balance is generally a goal for sound financial management, and also non-EMU countries have been able to achieve it. Nevertheless, we may surmise that the governments of both Sweden and the United Kingdom have made sound financial choices with regard to EMU, since both took a positive view of the membership in Economic and Monetary Union from the start. In the following, we will make reference to both of these criteria when ana-lysing changes in social expenditures.

*Figure 2.* Public deficits in 15 EU Member States, 1990–2005.
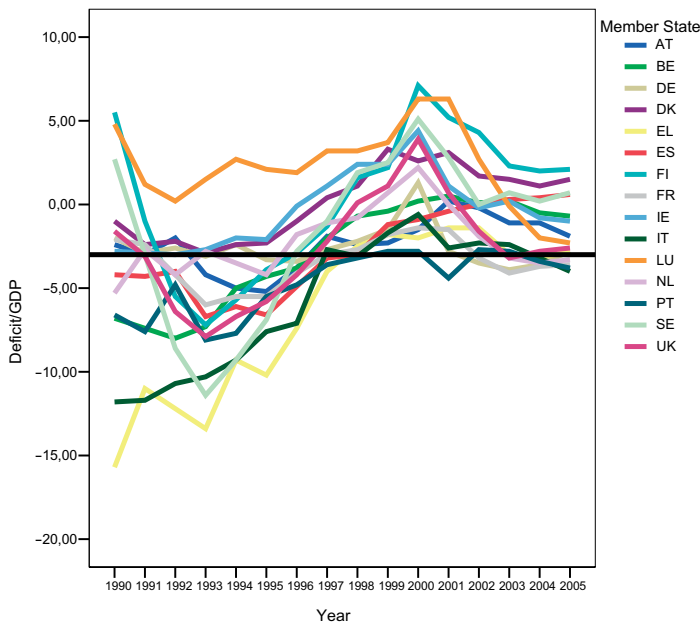
Source: European Commission 2004b, Table 75.

In order to investigate changes in the structure of public expenditures and the role of social expenditure in these changes, we must look at relative shares.

Since data on social expenditure as a share of general government outlays was not directly available, we have based our analysis on the expenditures in respect of the eight social risks identified in the ESSPROS classification as a share of GDP (see footnote 3). Thus, the ratio of social expenditures to general government outlays is calculated from their respective GDP shares. The GDP shares of social expenditures are presented in Figure 3, which points up the great variance in the national GDP shares. As a general observation, we note that the GDP shares have either increased slightly or remained roughly the same. Notable exceptions are the United Kingdom, where the GDP share of social expenditures has increased and has remained high from the early 1990s to the early 2000s, and Portugal, where the GDP share, initially quite low, has reached the EU average. In Ireland, the GDP share of social expenditures has been low and even decreased somewhat during the study period. This alone cannot be used as a basis for conclusions about crowding-out effects. Rather, we must look also at changes in the GDP share of other expenditures. This we do in Figures 4 and 5, the first of which looks at the share of interest payments in public expenditure and the second at core government expenditure calculated as the residual.

Figure 3. *The ratio of social expenditure to general government total outlays (%) in 15 EU Member States, 1990–2001.*
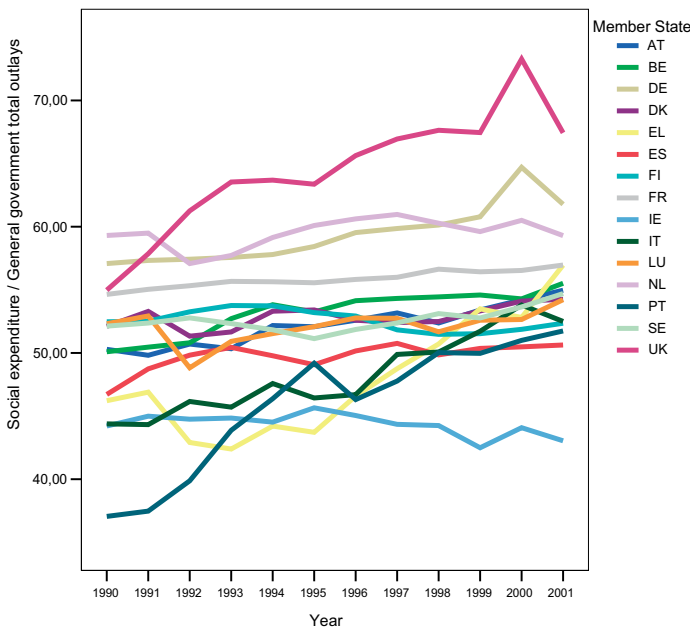
Source: Eurostat 2000, Table B 1.1; Eurostat 2004, Table B 1.1; authors' calculations.

The share of interest payments in total public expenditure has evolved similarly to the ratio of public debt to GDP. These developments took place against the backdrop of decreasing and converging interest rates during the study period. The shares of total public expenditure applied to specific purposes were calculated on the basis of the GDP shares of government interest payments and total public expenditure. Figure 4 demonstrates both the wide variation at the beginning of the 1990s and the decreasing trend in interest payments towards the end of the study period. Just as was the case with indebtedness above, with respect to government interest payments Belgium, Italy and Greece stand out because of their higher interest payments, while Luxembourg once again occupies a significantly lower level than the rest of the countries. The third expenditure item we study is the share of core government expenditures (productive expenditures) in total public expenditure.

The method by which the expenditure items are calculated is presented in Table 1 (p. 30). The calculation proceeds from the ratio of public expenditure to GDP, from which we have deducted the GDP shares of social expenditure and interest payments. This gives us the core government expenditure as a share of GDP and as a share of total government outlays. In Figure 5, the shares can be seen to range between 0.3 and 0.5, with slightly increasing variance towards the end of the period. The general trend is one of slight decrease. The greatest rate of decrease is seen in the United Kingdom. In Ireland, the share of core government expenditure has increased substantially, reflecting a significant drop in interest payments. The high level seen in Luxembourg is attributable to the average level of the share of social expenditure and the low level of the share of interest payments. The shares of expenditure depicted in Figures 3, 4 and 5 are subjected to further analysis. In the following, we will look at the historical trends and reciprocal relations between them in different time periods and among different groups of countries. We will also construct models to explain the effect of various background factors on changes in different shares of government expenditure.

From the point of view statistical analysis, there are certain problems with using relative shares as the dependent variable. This is because shares of government expenditure have a variability range of only [0.1].[15] Also, the requirement that the shares must sum up to 1 limits the range of statistical conclusions that can be drawn. Hence, we use the relative shares of social expenditure and core government expenditure as dependent variables in the statistical analyses. They are presented in graphical form for each country in Appendix figure 2. The limitations regarding variability and summing-up do not apply to relative shares. The shares, and the relative shares, are defined in Table 2.

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[15] We were alerted to this problem by an anonymous expert we consulted. The use of relative shares in statistical analyses was also proposed by this expert.

Figure 4. The ratio of government debt interest payments to general government total outlays (%) in 15 EU Member States, 1990–2004.
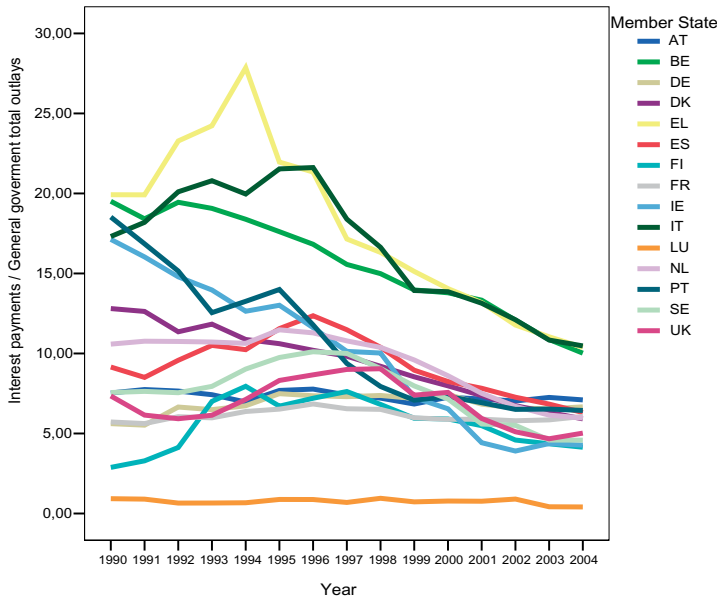
Source: European Commission 2003, Table A 4.7; authors' calculations.

Figure 5. The ratio of core government expenditure to general government total outlays (%) in 15 EU Member States, 1990–2001.
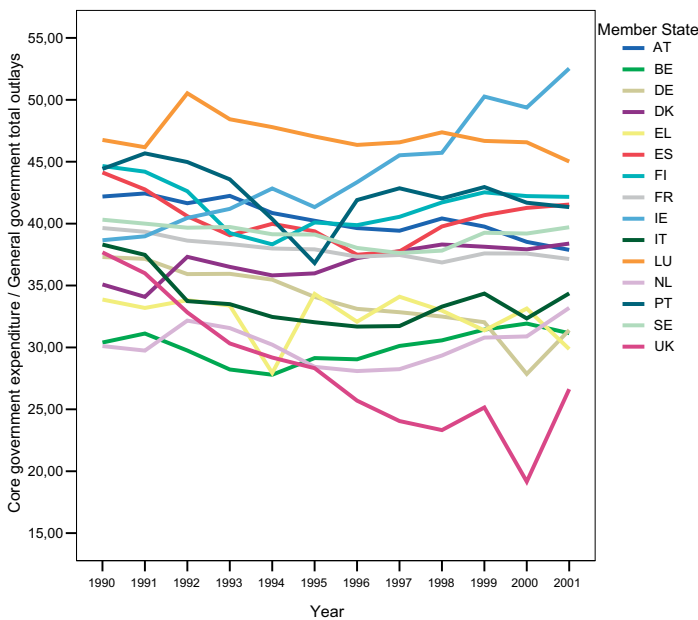
Source: OECD, Eurostat and authors' calculations.

Table 2. *Definition of the relative shares of social expenditure and core government expenditure.*

The **share** of social expenditure = social expenditure / general government total outlays

The **share** of core government expenditure = core government expenditure / general government total outlays

The **relative share** of social expenditure = share of social expenditure / (1 − share of social expenditure)

The **relative share** of core government expenditure = share of core government expenditure / (1 − share of core government expenditure)

## 4.2 Analysis of the variables within a regression model

Public debt and the balance of public finances are factors that have a potential to influence the three government expenditure items described above. Yet the expenditure structure and especially the share of social expenditure within the total government outlays is susceptible also to other factors. To evaluate the effect of indebtedness, we must first control for these other factors. Here, we will base our evaluation on a study conducted by the Public Finance Unit of the ECOFIN Council of the EU Commission (European Commission 2004a, 192–197). Its purpose is to provide a statistical report on changes in the structure of government expenditures in the period between 1991 and 2002. Government expenditures were broken down into six categories according to their function. Suitable data allowing such classification was available for only eight countries. Our basic objective was to create a regression model where structural changes in government expenditures are explained by economic, demographic and political background variables. The background variables differed somewhat from one category of expenditure to another, but potential output, output gap and public debt were used as independent variables in all of the equations.[16] Other independent variables were unemployment rate, the population share of the over-65s and the under-25s, and a dummy variable for the year immediately preceding the accession to EMU.

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[16] The estimation was performed on six expenditure categories and the total government outlays. The six categories were social security, public services, health care, education, financial subsidies and infrastructure, and other expenditure. First differences were generated for the variables, and public debt was lagged once to minimise endogeneity. Due to the small volume of the expenditure categories, they did not consider it necessary to use *instruments*. As the method of estimation, they used panel estimation of fixed effects. Standard errors were corrected for autocorrelation and heteroskedasticity. In reporting the results, they presented parameter estimates as well as standard errors and the total correlation coefficients. While the text states that regressions were performed for all EU Member States, this presumably means, judging from the number of observations, that estimation was performed only for total public consumption. The authors state that they assessed the robustness of the results by repeating the regressions with new scaled variables, where the key variables remained similarly signed. These results were not reported in any more detail.

The coefficient for potential output was presumed to be positive in those expenditure categories where expenditure is assumed to increase as well-being increases. According to the results, this is the case particularly with health and education expenditures. The output gap was an important explanatory variable particularly for the change in health expenditure, while unemployment rate – used as an alternative background variable to output gap – was better at explaining the change in social security expenditure. Public debt ended up with a negative coefficient in many expenditure categories, which according to the report reinforces the view that strict budget discipline leading to decreased indebtedness and thereby lower interest payments makes room for productive expenditures. Even though the period reviewed was rather short, the effect of variables related to the population's age structure could be discerned, especially when it came to explaining changes in social and health expenditures. These observations are among the factors influencing our choice of background variables. The choice of estimation methods is influenced also by the relative shares of government expenditures, which are used as the independent variables.

In the following, we will present some of the background variables used in this study, which can be seen as influencing the structure of public expenditure and whose effect may be measurable by statistical means.[17] The first is potential output, year-to-year

Figure 6. *Volume of potential production in 15 EU Member States in 1990–2004: Annual change in %.*
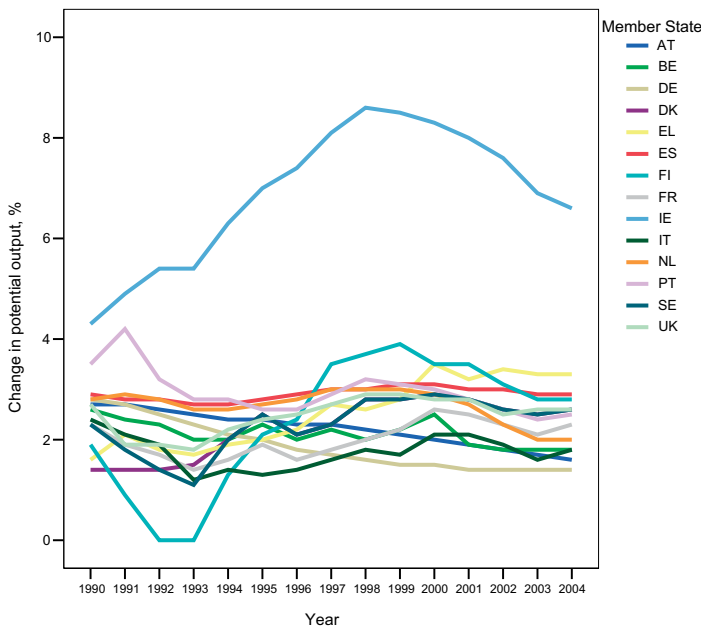

Source: European Commission 2003, Table A.5.3.

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[17] The group of background variables used in this study is open to additions. Of particular interest is an indicator of economic openness, which is intrinsically linked to the integration of national economies. This topic will have to be addressed in subsequent research.

changes in which are shown for each of the countries studied in Figure 6. The use of potential output in the estimation of the share of social expenditure can be justified by virtue of its ability to serve as a kind of proxy variable for economic prosperity. A commonly used method for the measurement of potential output is the so-called production function method. It measures the statistical dependence between production and such factors of production as capital and labour. Potential output is then calculated on the basis of marginal productivity with the assumption of zero underuse of inputs. In Figure 6, the potential output for Portugal has been calculated by a different method (European Commission 2003).

The starting assumption is that potential output will reduce the need for increased social expenditure. This assumption follows from our construal of the welfare impact of potential output and is therefore not dependent on economic cycles. According to Figure 6, Ireland diverges greatly from the other EU countries throughout the period studied. The year 1998 saw the culmination of a strong increasing trend. The economic recession of the early 1990s is manifest in the potential output of not only Finland but also to a lesser extent a number of other countries, where potential output has stabilised after 1997.

Figure 7. *Output gap in 15 EU Member States in 1990–2005. Deviation from potential production in %.*
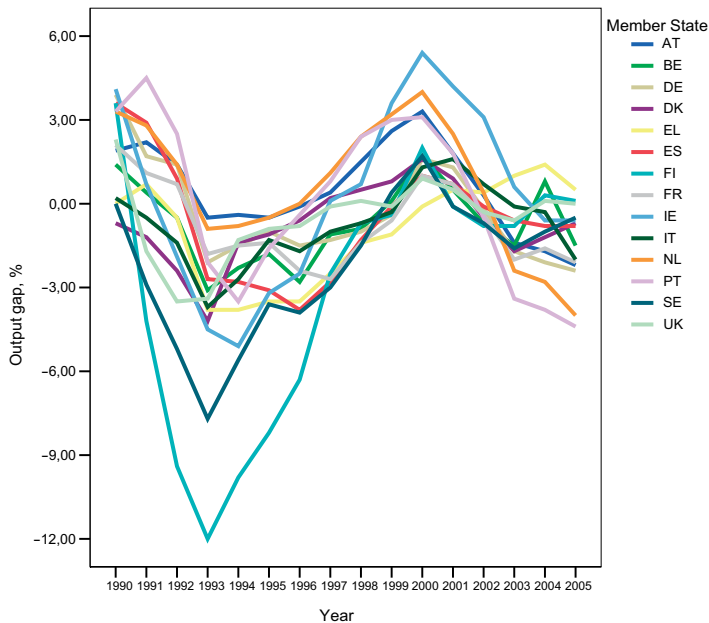


Source: OECD 2004a, Annex table 10.

Another background variable which – unlike potential output – reflects economic cycles and the ensuing need for social expenditure, is the output gap, presented in Figure 7. The output gap is calculated as the percentage difference between potential and actual output. It is assumed to behave in a countercyclical fashion, i.e. to increase in economic downturns and to decrease in recoveries, and thereby to either increase or decrease the need for social expenditure. Figure 7 shows the widening of the output gap in the early-1990s recession across the EU, but especially in Finland and Sweden. Towards the end of the 1990s, the output gap declined in all of the countries, but began to increase once again following the minor recession of the early 2000s.

Unemployment is understandably a background factor which can be expected to drive up the share of social expenditure in total public expenditure. The unemployment rates of the countries surveyed are presented in Figure 8. The Figure indicates the rapid increase in unemployment following the recession of the early 1990s, the decline in unemployment starting in 1994 as a result of stronger economic growth, and the renewed surge in unemployment at the turn of the century, followed by a stabilisation at the end of the study period. However, because the rate of unemployment has a strong correlation with GDP, using the output gap and the unemployment rate as explanatory variables in the same model creates problems of statistical inference because of the endogeneity of these variables. Therefore, we have decided to use the rate of unemployment as only one of many instrumental variables in models where the output gap is one of the explanatory variables.

In this study, the key variables have been generally adapted to the government outlays, which means that the financing of such outlays is purposely left out of the analysis. In estimations we are, however, using another variable (besides the rate of unemployment), which does not serve as an explanatory or control variable, but is a useful instrument for estimation, namely the ratio of taxes to GDP. The tax ratios of individual countries are presented in Appendix figure 8. It shows how the tax-to-GDP ratio has fluctuated during the study period and how the Nordic countries have tended to gravitate towards the upper end of the distribution, while such Mediterranean countries as Greece, Spain and Portugal – and, following a lowering of its tax rates after the mid-1990s, Ireland – are among the countries with low tax-to-GDP ratios.

Our final background variable is the age dependency ratio. Here, it refers to the ratio of under-15s and over-65s to the population between ages 15 and 65. There have not been any major changes during the study period (figure 9), but the spread between individual countries is around 10 percentage points. The sole exception is Ireland, where the age dependency ratio has dropped by about 20 percentage points. This is due to a series of changes in birth control policies. Of course, several arguments could be made against the inclusion of the age dependency ratio as a background variable in a study covering as short a period as this study does. All that being said, there have been changes in the individual countries, and the direction of change has not always been the same. The age dependency ratio is an important factor influencing government expenditures and the share of social expenditure.

Figure 8. Rate of unemployment (%) in 15 EU Member States, 1990–2005.
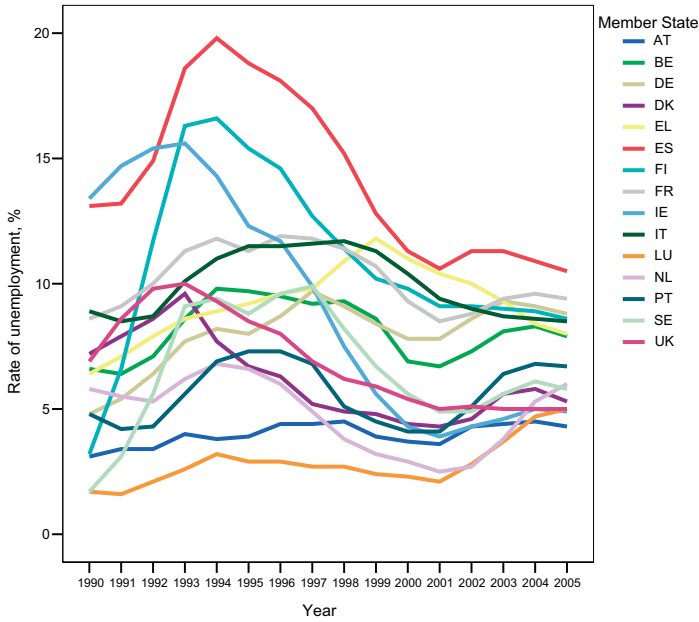
Source: European Commission 2004b, table 3.

Figure 9. Age dependency ratio in 15 EU Member States, 1990–2002. (0–14 & 65+)/15–64, %.
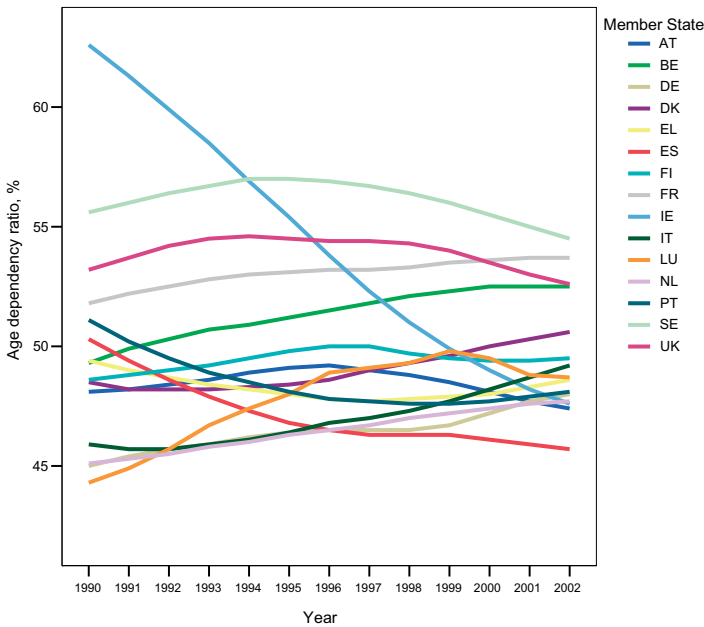
Source: OECD 2004b.

5 MODELS

On the basis of the variables described above, we will next formulate statistical models to explain changes in the two main expenditure categories of government expenditure.[18] An important point to note is that we are using as dependent variables the relative shares of different expenditures. Our choice of the variables explaining changes in the relative share of the expenditures was based to a certain extent on the models presented in the ECOFIN report mentioned above (European Commission 2004a, 197) for the analysis of the functional structure of government outlays. As explanatory economic variables we use potential output, which influences the structure of government expenditure through increased standard of living or economic well-being. The output gap introduces cyclical fluctuations into the analysis. As a variable, it works in the same direction as the rate of unemployment. However, the unemployment rate and the tax-to-GDP ratio are used only as instrumental variables in the estimations. The reason we use public debt as a share of GDP as an explanatory variable is that an increase in public debt will drive up the share of government interest payments and heighten the need to reduce expenditures, thereby possibly causing a crowding-out effect in the structure of government expenditures, i.e. the very topic which we are discussing. The age dependency ratio can act upon the expenditure structure either through social expenditures or upon the core government expenditures through changes in educational spending, to name one example. In addition to the variables mentioned above, we have created a classification indicator, which is assigned the value of 1 when a given country can be included among the countries running a surplus or having reduced their public debt significantly. Otherwise, this indicator is assigned the value of 0. By this, we seek to create a basis for the subsequent classification of the countries studied and for the conclusions that can be drawn from such classification. A separate explanatory model will be created for each relative share of expenditure.

– Dependent variables:
  – The relative share of social expenditure in total public expenditure
  – The relative share of core government expenditure in total public expenditure

– Explanatory and control variables:
  – Potential output
  – Output gap
  – Public debt
  – Age dependency ratio
  – Indicator of surplus (assigned a value of 0 or 1 according to government budget balance)

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[18] In the preceding, we argued for dividing government expenditures into three categories based on the available data and the procedure employed by Castles (2006). A third factor that influenced our choice of a three-way division of government expenditures was the social policy perspective adopted for this study.

– Instrumental variables:
  – Rate of unemployment
  – Tax-to-GDP ratio

The time identifier is year (t) and the cross-section identifier state (i). The data used in the estimations comprises 12 cross-sections, where the same set of variables is used in each cross-section for 15 countries. This is therefore a balanced panel data set with 180 observations.

Using the variables listed above, we developed regression equations for each of the relative shares of expenditures, which are presented in Table 3. Models (1)–(5) deal with the change in the relative share of social expenditure, and models (6)–(9) with the change in the relative share of core government expenditure. In the models, change is defined as the first differences or log differences of the variables.[19]

One of our points of emphasis is the effect of public debt on the relative shares of expenditure. Perhaps the simplest method to determine this effect is to perform a regression analysis between the change in each share of expenditure and the change in public debt. With regard to the relative share of social expenditure, this is accomplished by model (1) in Table 3. In this model, the difference in the relative share of social expenditure is explained by the difference of the logarithm of public debt and by an indicator variable assigned a value of either 0 or 1 according to the presence of a surplus. The estimation is performed with the panel-OLS method using a fixed-effect approach. Hence, the estimation includes country-specific dummy variables which allow the use of country-specific constants.[20]

To calculate the standard deviation, we use here, as for all other estimations, the White adjustment for autocorrelation, which means that the standard deviations are so-called robust errors. This method usually produces smaller standard deviations and thereby improves the statistical significance of the estimates (in terms of t-values). (See Wooldridge 2002, 274–276.)

As we know, in the case that remainder terms are autocorrelated, the t-values of parameters cannot be used for the testing of statistical significance. Hence, model (1) was estimated anew by including a lagged value of the endogenous variable as the explanatory variable. The model thus estimated (2) explained the change in the relative share of social expenditure by reference to the lagged change in the logarithm of

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[19] The use of differences can be justified by the fact that the models were found to be highly non-stationary when the estimation of the models was assayed with the PNS method. The estimation accuracy was poor, the results were not statistically significant, and the estimates were unstable. Based on the Durbin–Watson statistic, our hypothesis of the autocorrelatedness of the remainder term could not be discarded.

[20] The econometric software used by us (EViews version 5, 2004) only outputs the mean for constants. The fixed-effects method and the country-specific dummy variables were suggested by a referee commissioned by the editorial staff. On the fixed-effects method, see Wooldridge 2002, Mátyás and Sevestre 1996; on estimation methods for panel data sets see the EViews User's Guide 2004.

public debt, to the surplus indicator and to the first-degree autocorrelation coefficient. The Durbin–Watson test is not suitable for the testing of autocorrelation in model (2). The panel-OLS method was used in the estimation. The standard errors of the parameters were robust to autocorrelation.

Models (1) and (2) represent the simplest way of estimating the effect of indebtedness on the relative shares. In models (3) to (5) of Table 3, the range of explanatory variables has been expanded by the inclusion of the background variables used in the models devised by the EU Commission Public Finance Unit and depicting the change in the structure of public expenditure. In model (3), the differences of potential output, age dependency ratio and output gap have been added to the explanatory variables. Panel OLS, augmented by fixed-effect specification, is used as the method of estimation. Country-specific dummy variables were used in the estimation. The standard errors are White-robust standard errors. A first-degree autocorrelation term has additionally been included in the model. Model (4) is the same model except for the country-specific dummy variables.[21]

One of the fundamental problems with regression analysis is the endogeneity of variables. The report published by the EU Commission, to which we referred above, did not use instrumental estimation because of the fact that the individual categories of government expenditures were so tiny as to make it improbable that they would have any effect on output. Here, we have classified government expenditures into much broader categories, which means that endogeneity of the variables and, consequently, correlation of the explanatory variables with the remainder term are a possibility. Given that noncorrelation of variables with the remainder term is one of the basic principles of regression analysis, absence of noncorrelation means that the OLS estimators are biased and not consistent. To solve this problem, we have estimated model (5) using a two-stage OLS method (2SLS) for the analysis of the panel data.

The two-stage OLS estimation is performed by first selecting a group of instrumental variables. To enable identification, they must be at least equal to the number of parameters estimated. The instrumental variables should correlate with the explanatory variables and not correlate with the remainder term. First, an OLS regression is carried out, with one of the explanatory variables of the original equation serving as dependent variables and the instrumental variables selected serving as explanatory variables. This is repeated for each of the explanatory variables of the original model. Using the regression parameters thus estimated along with the instrumental variables, one calculates new estimates for the explanatory variables of the original equa-

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[21] A Wald Coefficient Test was performed on all of the nine models in order to test for first-degree autocorrelation. This is accomplished by carrying out a PNS regression between the error terms of the estimated model and their lagged values. The resulting autocorrelation coefficient can be tested – using the F- and χ^2-tests against the coefficient having a value of -0.5. The null hypothesis is that first-degree autocorrelation is not present. In the Wald Coefficient Test, the non-autocorrelation of models (1)–(7) was rejected, while the non-autocorrelation of models (8) and (9) could not be rejected. The results of the tests are available from the authors.

tion. In the second stage, the OLS estimation is repeated. Now, the estimates calculated in the first stage are added into the original equation as explanatory variables. The second-stage OLS estimators are unbiased and consistent. The fundamental question becomes the selection of instrumental variables. The selection is governed by two prerequisites: uncorrelation with the remainder term and correlation (partial correlation) with the explanatory variable. The former may be assumed but not tested. The second prerequisite can be tested by a standard OLS regression and t-test. Used as instrumental models in model (5) are, first of all, lagged endogenous and exogenous variables. This is due to a quality inherent in the estimation tool, which automatically selects these variables as instrumental variables should the model include an autoregressive term, as is the case with model (5). The other instrumental variables are the rate of unemployment and the tax-to-GDP ratio. The assumption here is that these variables meet the requirements established for the instrumental variables. In practice, econometric programs will perform the estimation automatically (as does the EViews program used here, which does not output the results of first-state instrumental estimations). Wooldridge recommends that two-stage estimation should not be performed because of the problems clearly associated with it, but that ready-made 2SLS estimation tools should be used. (See Wooldridge 2002, 91.)[22]

Models (6)–(9) in Table 3 relate to the proportional share of core government expenditure. The dependent variable is the change in the relative share of core government expenditure. Here, models (6) and (7) represent the simplest alternative and correspond in form to models (1) and (2). In model (8), change in potential output and change in the age dependency ratio have been included as explanatory variables. The method of estimation used is panel OLS with robust White standard errors. Country-specific dummy variables have been employed for the specification of fixed effects. A two-stage OLS estimation is again performed in model (9). The variables are the same as those used in model (8), except for the addition of a first-degree autocorrelation term. The instrumental variables are equivalent to those used in model (5). In the following, we will present the estimation results from the models featured in Table 3.

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[22] We tested the instrumental variables by performing an OLS estimation on each of the explanatory variables of the original model (5). According to the t-tests used for the analysis of partial correlation, the instrumental variables are statistically significant and therefore suitable as instruments. As we noted earlier, the uncorrelation of the instrumental variables and the remainder term could not be tested but had to be assumed. The test results are not appended here but are available from the authors.

Table 3. *Equations for the estimation of the relative shares of social expenditure and core government expenditure.*

Model	Method of estimation	Variables	Adjustment	Fixed effect
The relative share of social expenditure, first differences				
(1)	Panel OLS (FE) White robust standard errors	Public debt (-1), surplus indicator		Fixed across cross-section, country-specific dummy variables
(2)	Panel OLS White robust standard errors	Public debt (-1), surplus indicator	AR(1) process	
(3)	Panel OLS (FE) White robust standard errors	Public debt (-1), potential output, age dependency ratio, output gap, surplus indicator	AR(1) process	Fixed across cross-section, country-specific dummy variables
(4)	Panel OLS White robust standard errors	Public debt (-1), potential output, age dependency ratio, output gap, surplus indicator	AR(1) process	
(5)	Panel 2SLS White robust standard errors Instrumental variables: dependent variable and explanatory variables (lagged), rate of unemployment, tax-to-GDP ratio	Public debt (-1), potential output, age dependency ratio, output gap, surplus indicator	AR(1) process	
The relative share of core government expenditure, first differences				
(6)	Panel OLS (FE) White robust standard errors	Public debt (-1), surplus indicator		Fixed across cross-section, country-specific dummy variables
(7)	Panel OLS White robust standard errors	Public debt (-1), surplus indicator	AR(1) process	
(8)	Panel OLS (FE) White robust standard errors	Public debt (-1), potential output, age dependency ratio, surplus indicator		Fixed across cross-section, country-specific dummy variables
(9)	Panel 2SLS White robust standard errors Instrumental variables: dependent variable and explanatory variables (lagged), rate of unemployment, tax-to-GDP ratio	Public debt (-1), potential output, age dependency ratio, surplus indicator	AR(1) process	

6 GENERAL RESULTS

At the beginning of this study, we stressed that the linkages between EMU and social policy must ultimately be analysed on the basis of empirical data. In keeping with this principle, we will in this chapter present some empirical results. In Tables 4 and 5, we estimate, and present the results of, the regression models of the relative shares of expenditure presented in the preceding chapter. Following a commentary on the results, we will look at changes in the structure of government expenditure and at public indebtedness. This will be done by presenting dispersion diagrams between relative shares of expenditure and public debt on one hand and between relative shares of expenditure and budget deficits on the other for the entire study period. Following a presentation of some conclusions drawn from the diagrams, we form further dispersion diagrams for the relative shares of expenditure and public debt, representing three periods: before Economic and Monetary Union, during the run-up to EMU, and after the implementation of EMU. The observations made from these diagrams provide a starting point for the analysis by groups of countries presented in the next chapter.

6.1 Estimation results from the models representing the relative shares of expenditure

In Table 4, we present the models (1)–(5) explaining the relative share of social expenditures in government outlays. The first column lists the explanatory variables for the model. For each model, both parameter estimates and their robust standard errors are presented. If calculated, an autocorrelation coefficient is also presented. Finally, the table includes some diagnostic statistics (total correlations, Durbin–Watson statistics and F-values). In model (1), we use as the explanatory variable the lagged logarithmic change in the amount of debt, which, at 5 percent, receives a statistically significant positive coefficient. The classification indicator is not estimated precisely, which makes for a low explanatory power. The Durbin–Watson statistic suggests a negative first-degree autocorrelation, and in the Wald Coefficient Test, the hypothesis of the nonautocorrelation of the remainder term is overturned decisively. All in all, the parameters are inaccurately estimated, and model (1) allows no conclusions to be drawn about the effect of changes in public debt on changes in the relative share of social expenditure. For this same reason, budget surplus does not appear to be a relevant criterion for classifying countries either. Thus, no statistical foundation can be offered for this observation either. In the other simple model (2), the first-degree autocorrelation observed above has been taken into account by including an autocorrelation term among the parameters estimated. A significant change in the estimation results is that the coefficient for the public debt parameter turns negative but is no longer statistically significant. On the other hand, the classification indicator now becomes significant at the 1 percent significance level. The explanatory power of the model is thus greatly increased, which, however (and even if the Durbin–Watson statistic would indicate nonautocorrelation, i.e. approach the value of 2), could be

Table 4. Models explaining the change in the relative share of social expenditure.

Explanatory variable	Model (1) Panel OLS Country dummies (FE)		Model (2) Panel OLS Autocorrelation correction		Model (3) Panel OLS Autocorrelation correction Country dummies (FE)		Model (4) Panel OLS Autocorrelation correction		Model (5) Panel OLS Autocorrelation correction	
	Coefficient	Robust standard error	Coefficient	Robust standard error	Coefficient	Robust standard error	Coefficient	Robust standard error	Coefficient	Robust standard error
Constant	0,007	0,010	0,034	0,007***	0,025	0,009***	0,034	0,008***	0,041	0,008***
Change in public debt (lagged)	0,122	0,056**	−0,041	0,035	−0,066	0,071	−0,038	0,045	−0,183	0,081**
Change in potential output					0,005	0,011	−0,028	0,017*	0,019	0,035
Change in the age dependency ratio					−0,002	0,015	0,004	0,008	0,016	0,010
Change in the output gap					−0,009	0,003***	0,003	0,005	−0,015	0,008**
Classification indicator for the presence or absence of budget surplus	0,025	0,022	−0,021	0,008***	0,011	0,020	−0,020	0,009**	−0,029	0,014**
ρ coefficient			−0,608	0,163***	−1,090	0,238***	−0,630	0,165***	−0,625	0,170***
R2	0,054		0,365		0,534		0,257		0,185	
Durbin–Watson	2,505		2,119		2,434		2,139		2,156	
F	0,480		22,228***		5,558***		6,870***		8,166***	

***, **, *: statistically significant at 1, 5 and 10 percent levels, respectively.

caused by the inclusion of the first-degree autocorrelation term. In the Wald Coefficient Test, the autocorrelation coefficient calculated based on the remainder terms fell short of validating the hypothesis of nonautocorrelation. This suggests that the accuracy of the parameters estimated in model (2) is suspect as well, and that the results of model (2) do not allow us to draw solid conclusions about the effect of changes in indebtedness.

As explanatory variables, model (3) incorporates, in addition to the ones discussed above, changes in potential output, the age dependency ratio and the output gap. Only the negative coefficient of the change in the output gap is statistically significant. No statistically significant coefficient is obtained for the other explanatory variables used in the model, and so, based on the Wald Coefficient Test, the nonautocorrelation hypothesis is rejected, albeit not as decisively as in the case of the two preceding models. Thus, the results are again uncertain, and though a negative coefficient is obtained for the variable for public debt, no convincing statistical evidence is found. In model (4), statistically significant coefficients are obtained for potential output and the classification indicator. The coefficient of the change in public debt is negative but not statistically significant. The same restriction as in the preceding models here applies to the Durbin–Watson statistic, and in the Wald Coefficient Test, the null hypothesis of the noncorrelation of the remainder term is rejected. The results suggest that after taking into account the first-degree autocorrelation, some biased noise owing to the type of data used still remains.

In the final model (5) explaining the change in the relative share of social expenditure, we use two-stage estimation with the same explanatory variables as in models (3) and (4). Further, we include the instrumental variables described in the preceding. The parameters are now estimated with greater precision. A statistically significant coefficient is obtained for the change in public debt, the change in the output gap and the classification indicator, while the change in the age dependency ratio is nearly significant. The coefficient of the change in public debt is negative which indicates that an increase in public debt is associated by a decrease in the proportional share of social expenditure. As expected, a positive coefficient is obtained for the age dependency ratio, whereas the coefficient of the output gap is, against expectations, negative. The Commission report (European Commission 2004a, 197) raises the possibility that this could be due to the phenomenon whereby people are less likely to report sick during economic downturns for fear of losing their jobs. As the Wald test performed in model (5) on first-degree autocorrelation disproved the hypothesis of nonautocorrelation, we are again unable to conclusively show the effect of public debt on changes in the relative share of social expenditure, even if the accuracy of estimates did improve somewhat as we moved from model (1) to model (5). On the whole, the estimations reported in Table 4 give the impression that estimating the reciprocal effects of public debt and the relative share of social expenditure is fraught with uncertainty, and no strong statistical proof can be found for any negative connection between the two. That having been said, however, in model (4) the confi-

dence interval for the public debt parameters is marginally, and in model (5), clearly negative when using estimated standard errors. Of course, a similar uncertainty attaches to the observation that classifying the countries by reference to budget surplus is relevant when evaluating the change in the relative share of social expenditure in the EU countries.

In Table 5, we present the results for models (6)–(9), concerning the relative shares of core government expenditures. Models (7) and (8) represent simple models. Explanatory models have been added to models (8) and (9) in the same way as above. In model (6), a statistically significant negative coefficient is obtained for the change in public debt lagged by one period. Based on the Durbin–Watson statistic, we observe first-degree autocorrelation in the remainder term. The hypothesis of no autocorrelation is also rejected by the Wald Coefficient Test. In the following, we estimate model (7), which includes a first-degree autocorrelation term. It can be noted that the Durbin–Watson statistic approaches the value of 2. As we mentioned previously, this may not necessarily signify nonautocorrelation but may rather result from the very act of including an autocorrelation term in the estimation. The parameter estimate for public debt remains largely unchanged. However, the Wald test performed on the remainder term must again be rejected, leaving some uncertainty with regard to the conclusions that may be drawn from the t-values.

Considering the focus of this study, the most interesting estimation results are found in models (8) and (9). Change in potential output and change in the age dependency ratio have been included as explanatory variables in model (8). The method of estimation is panel OLS augmented by cross-section dummies. A statistically significant – at the 1 percent level of significance – negative coefficient is obtained for the lagged change in public debt. As for the other parameters, the standard errors are rather big, and the Durbin–Watson statistic suggests a moderate negative autocorrelation. Yet what is significant about model (8) is that the Wald test null hypothesis of autocorrelation cannot be rejected. This means that the statistical significance of the parameter can be estimated using the t-test, and that change in public debt has an inverse effect on change in the relative share of core government expenditure. This finding is reinforced by model (9), which features the same variables but where the method of estimation is two-stage panel OLS. An autocorrelation term is also included in the model. As instrumental variables, model (9) uses the same lagged variables as model (5) as well as the tax-GDP ratio and the rate of unemployment, whose partial correlations with the explanatory variables are tested with a separate OLS estimation. (See footnote 22.)

The findings show the change in public debt to have a negative coefficient which is statistically significant at the 1 percent level. Thus, application of the 2SLS method produced no difference in the finding obtained with the previous model. As public debt decreases, the relative share of core government expenditure in total government outlays increases. The classification indicator for surplus countries also is statis-

Table 5. Models explaining the change in the relative share of core government expenditure.

Explanatory variable	Model (6) Panel OLS Country dummies (FE)		Model (7) Panel OLS Autocorrelation correction		Model (8) Panel OLS Country dummies		Model (9) Panel 2SLS Autocorrelation correction	
	Coefficient	Robust standard error	Coefficient	Robust standard error	Coefficient	Robust standard error	Coefficient	Robust standard error
Constant	0,008	0,007	−0,002	0,003	0,004	0,005	−0,008	0,004**
Change in public debt (lagged)	−0,174	0,062***	−0,158	0,027***	−0,166	0,037***	−0,106	0,035***
Change in potential output					0,008	0,008	0,028	0,016*
Change in the age dependency ratio					0,007	0,017	−0,006	0,006
Classification indicator for budget surplus	−0,015	0,013	0,004	0,006	−0,009	0,011	0,014	0,006**
ρ coefficient			−0,270	0,101***			−0,333	0,105***
R2	0,195		0,213		0,216		0,230	
Durbin–Watson	2,801		2,085		2,603		2,176	
F	1,559*		11,853***		1,980**		5,766***	

***, **, *: statistically significant at 1, 5 and 10 percent levels, respectively.

tically significant at the 5 percent level. This suggests that, based on the presence or absence of a surplus, and its volume, the countries divide into groups with differing changes in the share of core government expenditure. A statistically significant coefficient is also obtained for the change in potential output. In light of our welfare interpretation, this means that an increase in economic well-being is associated with a rise in the relative share of core government expenditure. An accurate estimate is not obtained for the change in the age dependency ratio, though it is acceptable by sign. On the whole, this model explains the change in core government expenditure rather well. The Durbin–Watson statistic has approached the value of 2, and – most importantly – the null hypothesis of the Wald Coefficient Test cannot be rejected. This reinforces the statistical power of the model and the reliability of the parameter estimates.

The general observations made of the models explaining the change in the relative shares of social expenditure and core government expenditure are equivocal. It is not possible to show an effect on the relative share of social expenditure that would be attributable to a change in public debt. The findings appear to depend on model specifications and estimation methodology, none of which seem to provide particularly convincing evidence of the interdependence of indebtedness and social expenditure, to the extent that the parameter is common to all countries. The interdependence between change in public debt and change in the relative share of social expenditure would appear to be negative according to models (4) and (5), yet some uncertainty attaches to this finding. Furthermore, the countries may be divided into groups with different interdependencies according to some background factor such as budget balance. When it comes to the change in the relative share of core government expenditure, the effect of indebtedness can be discerned more clearly. In model (9), public indebtedness and the relative share of core government expenditure are inversely dependent. The significance of the surplus classification is given added weight as well. Taken together, these observations create a foundation for the analysis in the next chapter, where we examine the linkages between the relative shares and indebtedness in greater detail using dispersion diagrams.

It is worth bearing in mind that the estimation findings are somewhat inaccurate and rather sensitive to model specifications. This may be due to the nature of the data, which simply may not allow an analysis of the discrete effects of the explanatory variables. The length of the observation period and the relatively similar trend lines followed by the variables, made even shorter by the application of lag techniques, are known to present serious problems for these types of estimations.

6.2 Changes in the structure of public expenditure and public indebtedness

The results of the statistical analysis performed above suggest that public indebtedness affects the structure of public expenditure. In the estimations, the coefficients of the change in public debt were mainly negative and statistically significant both in terms of changes in the relative shares of social expenditure and of core government expenditure. Based on a trend analysis, we will next provide an estimate of the change in the shares of public expenditure related to debt level first for the entire period studied and then for the periods defined in the statistical analysis.

In Figure 10, we present a dispersion diagram with public debt as a share of GDP on the horizontal axis and the respective relative shares of social expenditure, core government expenditure and interest payments on the vertical axis. The Figure also shows the public debt criterion specified in the Stability and Growth Pact (60% of GDP), and a regression line depicting the linear dependence between debt and each of the expenditure shares.

Figure 10. *The relative shares of public expenditure and public indebtedness in 15 EU Member States, 1990–2001: Analysis based on a combined cross-section and time-series data set.*
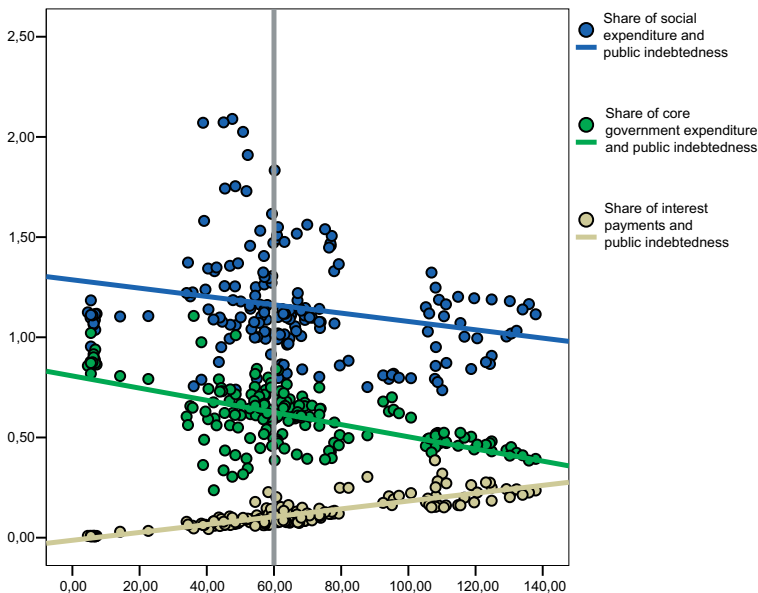
The dependencies observed in Figure 10 are similar to those perceived in the preceding statistical analyses. The regression line depicting the linear dependency of the share of social expenditure and public debt slopes downward. The same is true for the line representing the share of core government expenditure. The line describing the share of interest payments slopes upward, as it should, given that we are dealing with relative shares. The key thing is the absolute value of the slopes of the two descending lines. Observations of the core government expenditure appear to converge closer to the trend line than the corresponding observations of social expenditure. This is in line with the fact that the model depicting the relative share of core government expenditure was estimated with greater precision. When looking at the entire period, it appears that the shares of core government expenditure react somewhat more strongly to changes in public debt than do the shares of social expenditure. This suggests that with increasing public debt, higher interest payments may crowd out both core government expenditure and social expenditure. The crowding-out effect is more pronounced in the case of core government expenditure than social expenditure.

On the other hand, the question can also be approached via the debt criterion expressed in the Stability and Growth Pact. It assumes that as indebted countries approach the 60 percent debt level, lower interest payments will release resources that can be allocated to social expenditure and core government expenditure. Yet more of the freed resources may go to core expenditure than social expenditure. Then, as indebtedness decreases, core government expenditure, relatively speaking, crowds out social expenditure. Castles (2005) comes to the conclusion that the no more than moderate change in social expenditure seen in the 1990s suggests that the "race-to-the-bottom" scenario has not materialised. However, his conclusions are premised on an analysis where public expenditures are grouped into two categories. When the expenditure trends are analysed on the basis of three categories – as in Figure 10 – it appears that there are good grounds to say that there has, relatively speaking, been a race to the bottom. Although social expenditure has not contracted relative to GDP – and may even have increased – it may have lost ground, relatively, to core government expenditure.

In Figure 11, we present the second criterion of the Stability and Growth Pact, i.e., that the fiscal deficit must not exceed three percent of GDP. On the vertical axis, we again have the values for the three expenditure shares, but on the horizontal axis, we now have the public deficit. Also the deficit criterion is featured in the figure. The linear regressions are nearly the mirror image of Figure 10. The lines for the share of social expenditure and the share of core government expenditure are nearly parallel. This indicates that with increasing public deficits, interest payments have crowded out social expenditure and core government expenditure in the same degree. With the deficits having shrunk as a result of the application of the EMU criterion, the two shares have increased in the same manner.

Figure 11. *The proportional shares of government outlays and public deficits in 15 EU Member States, 1990–2001: Analysis based on a combined cross-section and time-series data set.*
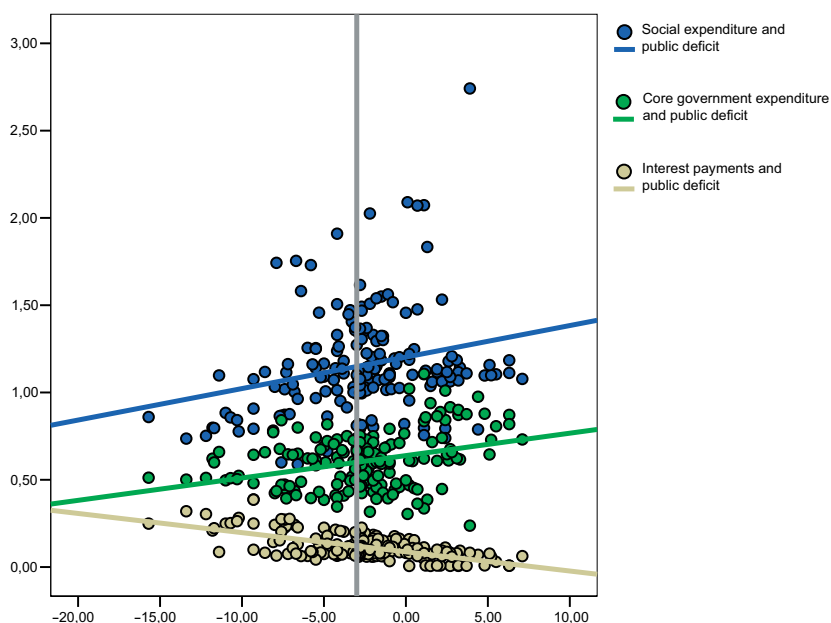
Next, we will undertake a more detailed analysis of the linkages between the relative shares of expenditure and public indebtedness during three periods. The first period covers the years 1990–1993, i.e., the period preceding the implementation of the Maastricht convergence criteria. In the second period, 1994–1997, the Member States prepared their economies for membership in the EMU. Finally, in 1998–2001, the criteria defined in the Stability and Growth Pact were being applied. The first period is shown in Figure 12a, the second in Figure 12b, and the third in Figure 12c.

It appears that the relationship between the GDP share of public debt and the share of public expenditure in GDP are similar in all three periods. The shares of social expenditure and core government expenditure decrease as the GDP share of public debt grows, while the share of debt interest payments increases along with debt. Yet there were other changes during the three periods, concerning the grouping of the observations and the behaviour of dependencies.

The 60-percent debt criterion is presented in Figures 12b and 12c respectively for the two later periods examined. These Figures reveal the divergence of the observations for the first period according to the level of indebtedness. Once the Member States aiming at EMU membership undertook measures to adjust their economies to the

Figure 12a. *Public debt and the relative shares of expenditure, 1990–1993.*
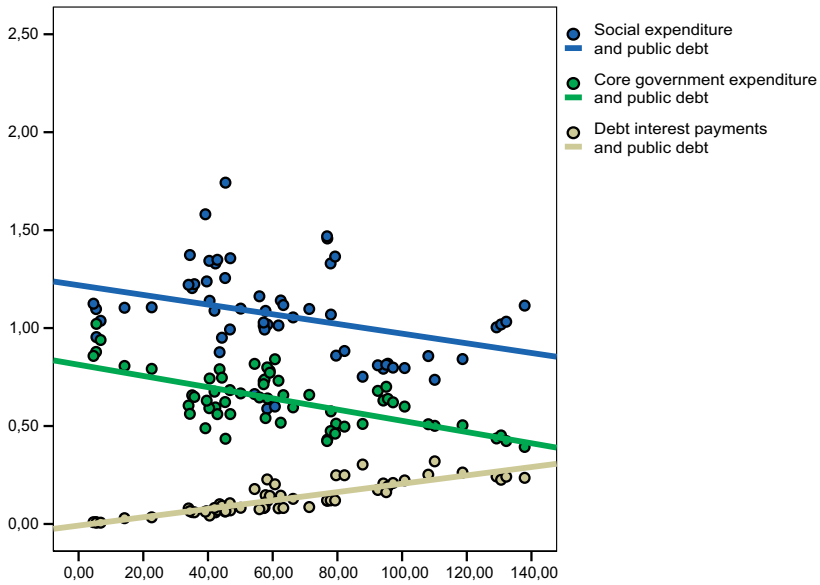

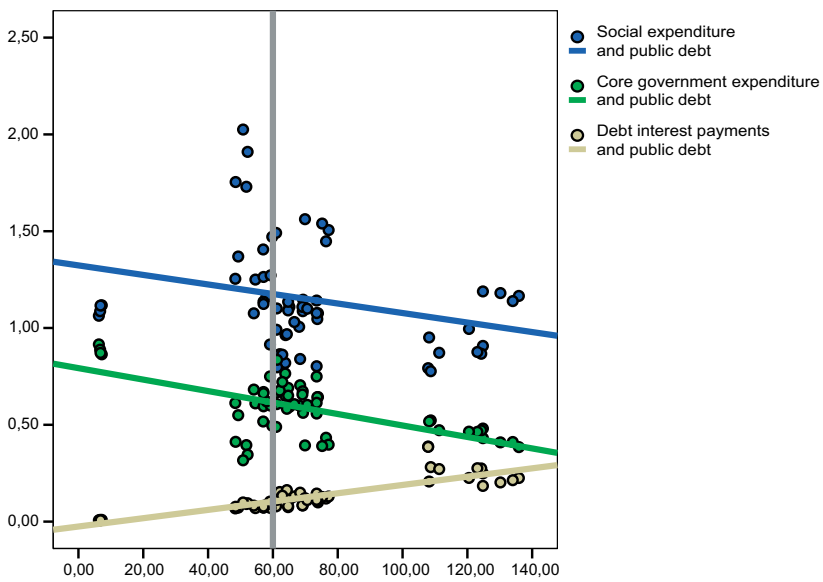*Figure 12b.* *Public debt and the relative shares of expenditure, 1994–1997.*
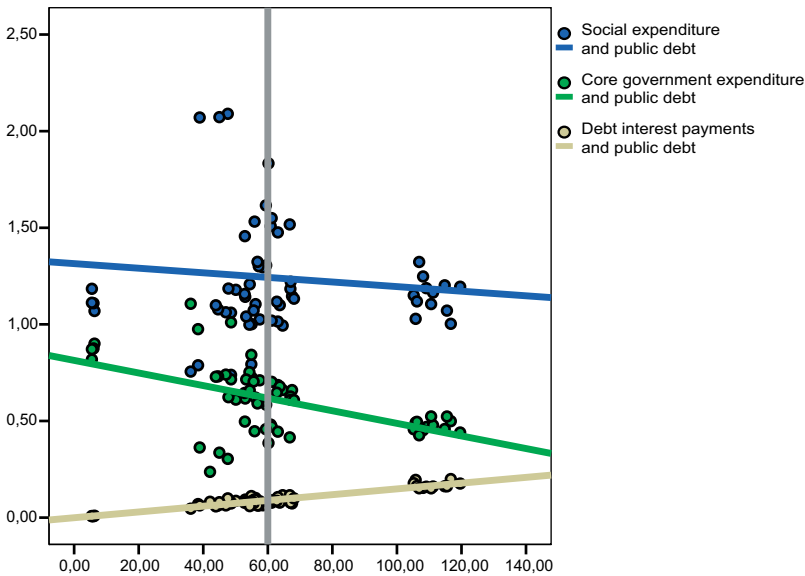
Figure 12c. *Public debt and the relative shares of expenditure, 1998–2001.*

Maastricht convergence criteria in the second period, the observations shown in the Figure begin to draw closer to the line representing the debt criterion. Some grouping according to the level of indebtedness can also be discerned.

By the third period, the countries with a low debt burden and those with a high debt burden have diverged into two discrete groups. The bulk of the observations congregate around the 60-percent criterion. The emphasis is seen to have shifted to just below the criterion. This implies that the Stability and Growth Pact is one of the background factors influencing the management of the Member States' public economies. The heavily indebted countries have failed to rein in their indebtedness in accordance with defined goals.

A look at the structure of public expenditure in the three periods reveals that at times of increasing indebtedness, lower debt interest payments have been associated with a simultaneous increase in the relative shares of both social expenditure and of core government expenditure. In the second period, as the accumulation of debt continued to decrease, the share of core government expenditure grew somewhat faster than the share of social expenditure. This development can be seen at its clearest in the third period (Figure 12c), where the change in public debt is having a negligible effect on the ratio of social expenditure to public expenditure and the relative share of core government expenditure has increased nearly proportionately to the decrease in the share of interest expenditure.

This may be attributable to the principle enshrined in the Lisbon Strategy, whereby public expenditure is to be focused on areas with a positive effect on national economies. Over the entire period, the crowding-out effect of public debt impacts upon social expenditure and core government expenditure more or less equally, yet towards the end of the period, it increasingly spares core government expenditure and thereby eats into social expenditure more and more.

7 COUNTRY-BY-COUNTRY ANALYSIS

In Figures 12a, 12b and 12c we observe a set of distinct groups of Member States in the different periods. However, the Figures do not reveal the development within each group. Therefore, we will divide the data according to criteria relevant to Economic and Monetary Union and thus analyse the effets of the Union. At first, we will look at each of the groups of Member States in light of the selected criteria. Later on, we will analyse the crowding-out effect in different groups of Member States.

7.1 Groups of Member States

Next, we will form four groups of Member States and examine what takes place within each group. Beginning with the indebtedness perspective, we will separate the countries with high debt loads as well as countries which reduced their debt load significantly during the period observed. A second classification criterion is the general government balance. With this criterion, we pick out countries with fiscal deficit problems and countries with no such problems. Thus, the group 'Surplus countries' includes both countries that have rapidly paid down their debt (Ireland and Spain) and countries whose public finances are in surplus (Denmark, Finland and Sweden). The remaining countries make up a somewhat heteregeneous residual group.

The groups and their constituent countries are:

1.   Heavy debt load:
       Belgium, Italy, Greece

2.   Fiscal deficit:
       Portugal, France, Germany

3.   Budget surplus:
       Ireland, Sweden, Finland, Denmark, Spain

4.   Other countries:
       The United Kingdom, the Netherlands, Austria, Luxembourg

This classification does not correspond to the three – or four – "worlds of welfare capitalism" type of analysis commonly used in comparative social policy research. The 'Surplus countries' are the closest match with the traditional social security regimes and – viewed from the public surplus perspective – have distinctly Nordic features. This points to an interesting anomaly in model-based research traditionally focusing on benefits and services: namely, that changes in financing are not regime-specific.

The groups are compared on the basis of Figures 13–16. First, in Figure 13, we present the evolution of total public expenditure as a share of GDP between 1990 and 2005 in the individual countries. Second, Figure 14 shows social expenditure as a share of total public expenditure, while Figure 15 presents core government expenditure as a share of public expenditure. Both figures refer to the period between the early 1990s and 2001. Finally, Figure 16 presents the average GDP shares of social expenditure and core government expenditure between 1990 and 2001. Country weights were not used for the calculation of the averages.

Figures 13 and 14 reveal both consistent trends among countries belonging to different groups and a dispersion between individual countries. Figure 13 shows a similar trend in the GDP share of public expenditure that can be observed in all of the country groups. This share increased with the early-1990s recession culminating in 1993, but then decreased until the turn of the century, after which it has remained largely unchanged in most of the countries.

Italy is an exception. There public expenditure as a share of GDP declined faster than elsewhere between 1993 and 2000. Among the deficit countries, Portugal shows a slightly increasing trend. Denmark and Ireland have followed a similar trend, albeit from a different starting level. Also France followed a slightly increasing trend. In the surplus group, Denmark and Finland have remained at the high level reached in the early 1990s. Sweden followed a similar trend of a rising GDP share of public expenditure in the early 1990s, a subsequent decline, and then a flattening of the trend in the early 2000s, but on a higher level than the other countries. The Nordic countries have followed a relatively uniform pattern of development. Among 'Other countries', the United Kingdom and the Netherlands saw increases in the early 2000s, and Luxembourg an especially large one. The lines of development portrayed in Figure 13 create the framework for our analysis of the changes in the structure of public expenditure.

Figure 14 presents social expenditure as a share of public expenditure during the period under consideration. To begin with, we must note that the ratio of social expenditure to public expenditure shown in the Figure does not provide a clear answer to the race to the bottom hypothesis, which is one of the topics addressed by comparative welfare state research (see Castles 2006). Social expenditure should be examined in proportion to GDP and changes therein. However, the Figures do allow us judge to what extent social expenditure has held on to its relative position in the changing structure of total public expenditure. Substantial differences can now be observed between the country groups. The share of social expenditure has increased much more among the heavily indebted countries than in any other group. In Greece and Italy, the rate of increase over the period studied exceeded 10 percentage points, which is more than in Belgium, where the starting level was higher.

The countries which reduced their debt load quickly reveal a different trend. Denmark and Ireland are on different levels and followed different lines of development. While Denmark saw an increase from an already high starting point, in Ireland the

Figure 13. *The ratio of public expenditure to GDP (%) in 15 EU Member States, by country groups, 1990–2005.*
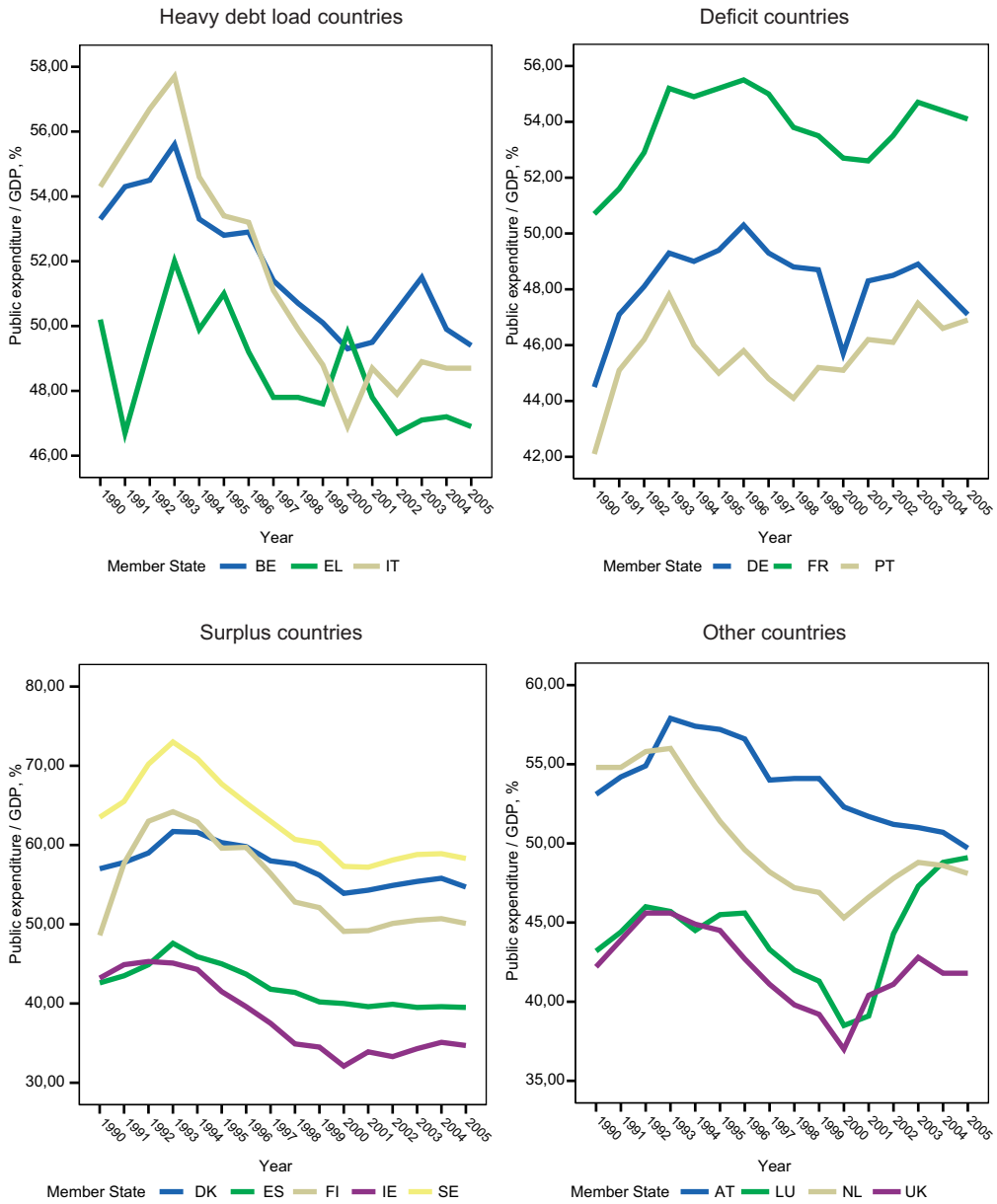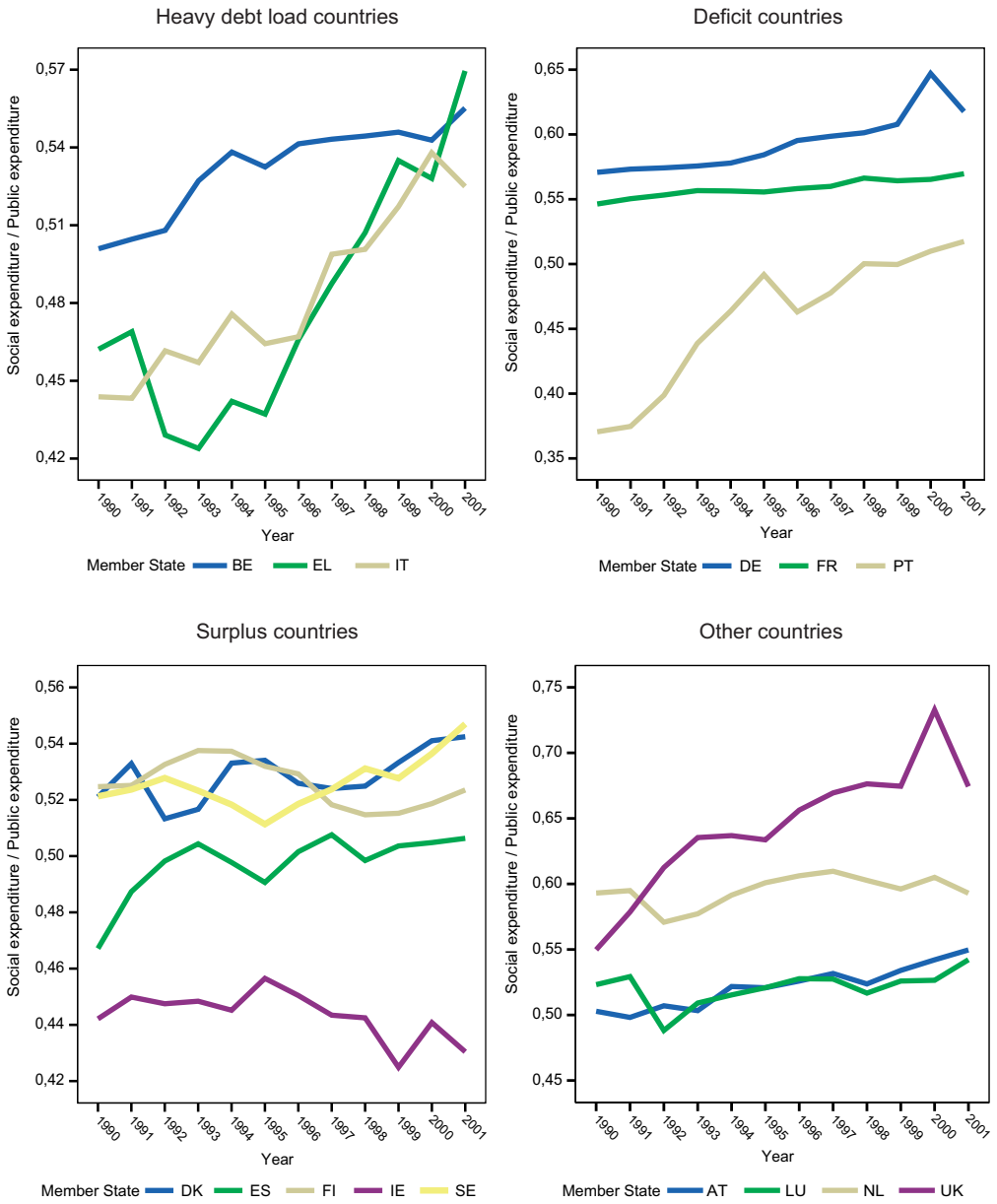
Figure 14. *The ratio of social expenditure to total public expenditure in 15 EU Member States and in country groups, 1990–2001.*

GDP share of social expenditure declined to some extent. For Spain, observations are available only from the mid-1990s, and no major changes can be seen in the study period. The deficit countries have followed two main and diverging lines of development in terms of the GDP share of social expenditure. In Germany and France, the share has remained the same or even edged upwards, whereas in the other countries of the deficit group there has been relatively steady increase throughout the study period.

Among the countries running a budget surplus, the Nordic countries stand apart from Ireland with their relatively steady GDP share of social expenditure, compared to Ireland's slightly decreasing trend on a generally lower level. It appears that in the heavily indebted and deficit groups, the share of social expenditure in GDP is mainly increasing, whereas among the countries that have a budget surplus or have rapidly reduced their debt load, the share reached a steady state during the period under consideration.

Among 'Other countries' – especially in Austria and Luxembourg – the change has been quite moderate. The Netherlands followed a similar trend but on a slightly higher level. In the United Kingdom, social expenditure as a share of total government outlays went up quickly until the beginning of the 2000s, after which there was a sharp decrease.

Figure 14 indicates that there is variation within the country groups in the way the share of social expenditure has developed. Yet clearly there has been an increasing trend in both the heavily indebted and the deficit countries. A slightly increasing trend can also be observed in the 'Other countries' group, whereas the countries that have rapidly reduced their debt loads and those running a budget surplus have seen relatively little change.

A similar analysis can be made on the basis of Figure 15, which presents the share of core government expenditure in total public expenditure within each country group. Among the heavily indebted countries, the prevailing trend in the early part of the survey period is a decreasing one, followed by steady development. In Greece, the changes have occurred in jumps and starts. Among the deficit countries, Germany and France saw a decreasing throughout the survey period, while Portugal has steadied at a level of a little over 40 percent after a strong decrease lasting until the mid-1990s. The surplus countries saw a relatively steady increase from the mid-1990s onwards, with the exception of Ireland, where the increase was much faster. In the 'Other countries' group, the share of core government expenditure in total public expenditure decreased slightly throughout the survey period. The exception was the Netherlands where it held more or less steady.

However, Figures 13–15 do not provide a sufficient basis for settling the crowding-out question, and therefore we will present in Figure 16 the average ratio of social expenditure and core government expenditure to total public expenditure in each country group.

Figure 15. *The ratio of core government expenditure to total public expenditure in 15 EU Member States and in country groups, 1990–2001.*
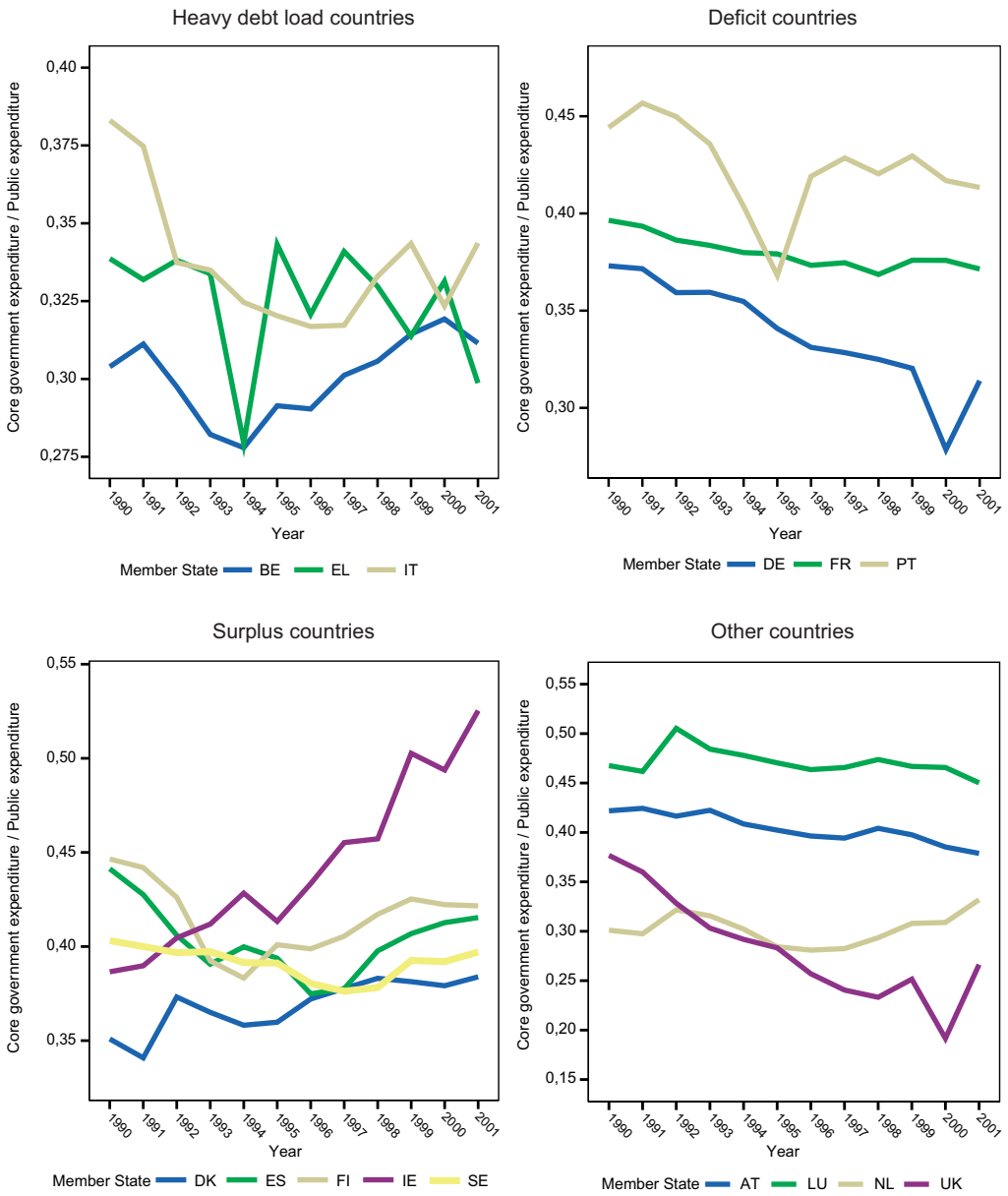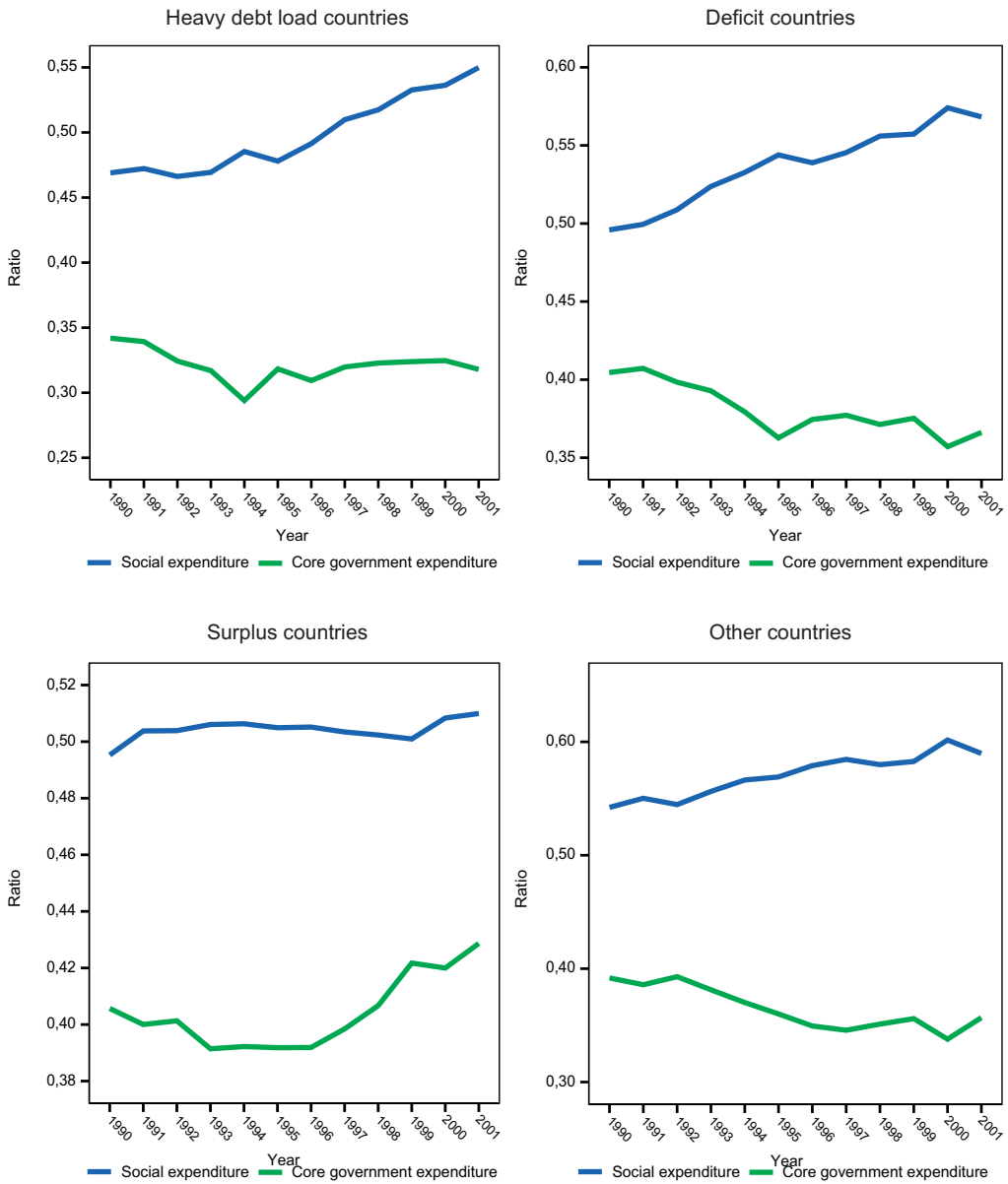
Figure 16. *The ratio of social expenditure and core government expenditure to total public expenditure in country groups, 1990–2001.*

7.2 Evidence of crowding out in the different country groups

This study focuses on the structure of public expenditure, and any changes in it, from the perspective of the EMU criteria on public debt and fiscal deficits. Hence, the structural crowding-out effect studied here cannot be examined by focusing on the development of one share only. Figure 16 presents the trend lines of the shares of social expenditure and core government expenditure in each of the four country groups over the study period. In this case, the time series represent the average for each group, which means that dispersion among countries in a particular group – previously visible – is now concealed. Some clear conclusions can still be drawn.

The share of social expenditure in total public expenditure grew significantly in heavily indebted countries and in countries with fiscal deficits. The share of social expenditure has remained largely unchanged in countries that have rapidly reduced their debt loads and in countries running a budget surplus. On the other hand, the share of core government expenditure saw only moderate decline in countries with heavy debt loads or with deficits. In the 'Other countries' group, the share of social expenditure increased slightly, while the share of core government expenditure decreased. Some of the increase in the share of social expenditure can be ascribed to the United Kingdom. A different kind of development is seen among the countries having rapidly paid down their debt loads or running a budget surplus. In both of these groups, the share of core government expenditure has increased substantially. In evaluating this development, we must bear in mind that, in the larger picture, the reduction in debt and deficit has been associated with a decrease in the share of debt interest payments and thereby a targeting of public expenditure either on the share of social expenditure or the share of core government expenditure.

Figure 16 shows crowding-out to have occurred in both heavily indebted countries and in countries with a fiscal deficit, with social expenditure displacing other expenditure while the share of debt interest payments has shrunk. The same development can be observed in the 'Other countries' group. Correspondingly in countries having rapidly paid down their debt load or running a budget surplus, other public expenditure displaced social expenditure while the share of debt interest payment contracted. Figure 16 presents the share of public expenditure in the country groups. Above, we examined the relative shares of expenditures. The question arises: is the conclusion that may be drawn from our previous analysis different from that drawn from Appendix Figure 9, which sets out the relative shares of expenditure. The answer is negative. The relative shares of social expenditure increased among heavily indebted countries, among countries running a budget deficit and among 'Other countries'. They remained largely unchanged in the countries running a budget surplus. Correspondingly, the relative shares of core government expenditure have declined in all other country groups than the surplus countries, where they increased starting from the mid-1990s. These observations are summarised in Table 6.

Table 6. *Summary of the crowding-out of shares of public expenditure in different country groups.*

Country group	Ratio of total public expenditure to GDP	Ratio of social expenditure to public expenditure	Ratio of core government expenditure to public expenditure	Relative crowding-out
Heavily indebted countries	Decreasing trend	Increased	Slightly decreased	Relative crowding-out of core government expenditure by social expenditure
Deficit countries	Initial increase followed by plateauing (Portugal at a low level, France at a high level)	Increased strongly in Portugal, less in the other countries	Decreased	Relative crowding-out of core government expenditure by social expenditure
Surplus countries and countries having rapidly reduced their debt load	Increased in the early 1990s, decreasing trend after 1993, plateaued after 2000. Differences between individual countries unchanged	Unchanged or increased slightly	Increased	Relative crowding-out of social expenditure by core government expenditure
Other countries	Increased in the early 1990s, large intercountry differences, decreasing trend between 1993 and 2000, then plateaued	Mainly increased slightly	Decreased	Relative crowding-out of core government expenditure by social expenditure

As we noted earlier, the direct impact of Economic and Monetary Union on the share of social expenditure is difficult to ascertain, for the two goals of reducing public debt and keeping the budget deficit within a margin of 3 percent of GDP are pursued not only by Euro-zone countries. For this reason, the graphical analysis was repeated with the difference that the countries were classified into EMU members and non-members.[23] The results indicate that there is a negative dependence between public debt and the relative share of social expenditure in the non-member countries. In fact, as indebtedness increased, the share of social expenditure declined in both groups, but did so more rapidly in the non-member countries. The groups also diverged in terms of core government expenditure. In the EMU member countries, a reduction in public debt is associated with an expansion of the share of core government expenditure. In the non-member countries, it is accompanied also by a slight decrease in the share of other expenditures.

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[23] The Euro zone includes Austria, Belgium, Germany, Greece, Spain, Finland, France, Ireland, Italy, Luxembourg, the Netherlands and Portugal. Not included in the Euro zone are Denmark, Sweden and the United Kingdom.

The relative share of social expenditure in total public expenditure increased in both country groups, yet the increase was faster in the non-member countries. The relative share of core government expenditure declined somewhat in both groups. However, the development was not consistent. Following a decrease lasting until the mid-1990s, the share of core government expenditure began to increase in the member countries, while no such U-shaped trend could be observed in the non-member countries. When the relative shares of social expenditure and other expenditure in total public expenditure were combined in both groups, no major differences in the overall trend could be observed between them. The relative share of social expenditure increased slightly in both EMU member and non-member countries, while the relative share of other (core) expenditure decreased to some extent. This indicates that the classification of the countries according to indebtedness and deficits was informative in terms of evaluating the crowding-out effect.

8 SUMMARY AND DISCUSSION

At the start of this study, we asked whether social expenditure crowds out other pub-lic expenditure or vice versa, under conditions of different degrees of indebtedness and government budget balance. Have the debt criterion and deficit limit imposed by EMU had any effect on this? In this chapter, we will first present some of the basic findings of this study. Then, we discuss certain events of recent years for which there is as of yet no statistical data. Finally, we address a number of current issues and propose some topics for further research.

8.1 Empirical results

An analysis of the statistical panel data on EU countries showed that the dependence between the changes in public indebtedness and the relative share of social expendi-ture may be a negative one. A statistically better founded negative dependence was found to obtain between the change in the relative share of core government expendi-ture and public debt. This suggests that service costs of public debt crowd out both social expenditure and core government expenditure. When the period was analysed in three segments, it was discovered that while the shares of social expenditure and core government expenditure were associated in the same way with indebtedness in the first two segments, in the third segment, change in indebtedness mainly impacted the share of core expenditure, while the share of social expenditure stabilised.

This may be an indication that the objective expressed in the Lisbon Strategy of fo-cusing public expenditure on so-called productive investments, such as education, research and active labour market policies, may have influenced the decision-making behind the change in the structure of public finances. This observation finally emerged in the country group analysis. Underneath the general trend, we found a division between, on one hand, heavily indebted and deficitary countries, and on the other, countries which had reduced their debt loads by various means or had implemented economic policies to achieve a fiscal surplus. In the former, social expenditure was prioritised over other public expenditures, while in the latter, social expenditure ap-peared to be displaced by other expenditures.

One important observation is that the dependencies between indebtedness and dif-ferent shares of expenditure should not be construed as meaning that Economic and Monetary Union or the Stability and Growth Pact and its criteria alone are behind the development, for there are also non-EMU Member States that have followed a similar trajectory. This could be determined also by empirical means. Hence, the con-clusions apply also to Member States outside the Euro zone. The Nordic countries have followed a relatively uniform pattern of development.

In view of the above, we can ask whether Economic and Monetary Union is a threat to systems of social provision. In connection with steps to balance public finances, many heavily indebted countries have prioritised social expenditures over other expenditures. The share of public investments in GDP declined in most Member States during the 1980s, though in the subsequent decade, the decline stopped or slowed down in some countries. The Commission's view is that large public investments are compatible with Economic and Monetary Union and the criteria expressed in the Stability and Growth Pact. However, large public expenditures are not quite unproblematic when it comes to the terms of the Stability and Growth Pact. This is partly because based on the forecast models used, achieving stability in the public finances by cutting expenditures rather than raising more revenue produces the desired growth.

The most heavily indebted countries, in particular, have taken a much softer approach to social expenditure than to other public expenditure. Alternatively, activities in other government sectors have been shifted off the public budget, which here appears as a contraction of the relative shares of those sectors. This is likely a partial explanation for the exceptionally large share of public expenditure accounted for by social spending in the United Kingdom. Another explanation for the decreasing shares of other public expenditure besides social expenditure is a reduction of debt payments as a result of lower interest rates. Countries with a lighter debt load have come up with a diverse range of responses to the question of public indebtedness. Many countries, in fact, increased public expenditure in relation to GDP during the 1990s, which in turn made it possible to raise both social expenditure and other public expenditure.

Among the countries surveyed, Portugal joined the ranks of welfare states quite rapidly, when examined on the basis of social expenditure and the extent of legislation on social provision. At the same time, its public debt has stayed close to the 60 percent limit. More recently, Portugal has come up against the challenge of a sizable public deficit. On a slightly critical note, it could be said that the social policy reforms of the 1990s – important as they were – and the cost increases associated with them were not planned to take into account the possibility of below-average economic growth, which resulted in considerable fiscal policy challenges at the beginning of the 2000s.

8.2 Recent challenges facing Economic and Monetary Union

Right at the beginning of this study, we mentioned that the research on the Europeanisation of social policy has so far focused on the Lisbon Strategy and the coordination of social security and the internal market. Calls for a "new balance" are being increasingly heard from an ever wider range of sources. Under the Lisbon Strategy, perspectives relating to growth, economic development, employment and social policy are to receive balanced attention. Social policy formulations are to be taken into account when implementing the legislation on the internal market. Some progress has in fact been made in the Union on translating these formulations into the lan-

guage of politics and into actual reforms that could be implemented. Solutions have been sought in policy planning methods that would ensure a balanced process and by promoting an approach that would introduce social and health policy considerations into all policy-making.

It is interesting to note that similar calls have not been made in relation to Economic and Monetary Union. EMU as a whole has taken a back seat, as if there were no significant mechanisms at play between EMU and social policy – a notion disproved by the above analysis. This is somewhat bewildering, because in the long term the impact of Economic and Monetary Union on the social security systems of the Member States will most likely by far exceed that of the Lisbon Strategy or the legislation on the internal market. A possible explanation for this can be found in the "diffuse" nature of monetary policy. It is not as tightly linked institutionally with individual ministries, and the independence accorded to the central bank system shields it from public debate.

The Stability and Growth Pact was revised in spring 2005 in a convoluted process. The reform was triggered by several factors which highlighted problems with the functioning of the existing Pact. The first is the repeated failure to coordinate economic and monetary policies. The Member States have on several occasions made a commitment to achieve long-term sustainability and balance in their public finances. A statement to this end was included in the Resolution of the European Council (consisting of heads of state and government) on the Stability and Growth Pact adopted in Amsterdam on 17 June 1997. According to section 1,

> The Member States commit themselves to respect the medium-term budgetary objective of positions close to balance or in surplus set out in their stability or convergence programmes and to take the corrective budgetary action they deem necessary to meet the objectives of their stability or convergence programmes, whenever they have information indicating actual or expected significant divergence from those objectives.

However, the commitment has not proved completely unproblematic and has been brought up periodically. Changes to the programme have continued to be introduced annually. The Barcelona European Council (3/2002, section 6), for instance, stated the following (emphasis added):

> Coordination of fiscal policies is anchored in the commitment to sound public finances and rules of play agreed in the Stability and Growth Pact. *Member States will maintain or respect the medium term budgetary objective of close to balance or in surplus by 2004 at the latest.* Automatic stabilisers should be allowed to play symmetrically, provided that the 3% of GDP limit is not breached in downturns. This means, in particular, that in expansionary phases growth dividends should be fully reaped. Member States could makes

use of discretionary fiscal policy only if they have created the necessary room for manoeuvre.

Most EMU countries failed to meet this commitment in 2004. Moreover, several Member States had difficulty fulfilling the deficit criterion. In practice, then, EMU had lost some of its credibility.

The decision made in November 2003 concerning the French and German deficits, in which ECOFIN (Informal Council of Economic and Financial Ministers) waived the application of the Excessive Deficit Procedure, also damaged EMU's credibility.[24] This decision was somewhat perplexing, as the procedure had been previously applied to smaller Member States that found themselves in a similar situation. As a result, many concluded from this that different rules apply in the EU for small and large EMU Member States. The EC Commission brought the matter before the EC Court of Justice, which in summer 2004 issued a ruling concerning the Member States' decision not to apply the procedures provided for in Article 104(8) and (9) of the Maastricht Treaty to France or Germany. The Court ruled that the Commission's request would not be addressed to the extent that it concerned the annulment of the decision by the Council of the European Union not to adopt the measures referred to in recommendations given by the Commission under Article 104 (8) and (9) of the Maastricht Treaty. On the other hand, "the Council's conclusions of 25 November 2003 adopted in respect of the French Republic and the Federal Republic of Germany respectively, in so far as they contain a decision to hold the excessive deficit procedure in abeyance and a decision modifying the recommendations previously adopted by the Council under Article 104(7) EC", were annulled. This lukewarm compromise, according to which the Commission shall make no demands, nor the Council act in a manner of its choosing, left an even wider scope of interpretation than previously instead of narrowing down the range of alternatives.

A third unfortunate practice is the rather widespread use of creative accounting when it comes to fulfilling the EMU criteria. Creative accounting is not unlawful *per se* as long as it is done within commonly accepted rules or if the criteria are fulfilled via windfalls from the sale of state assets, for instance. Along with other countries, Finland availed itself of such methods in 1994, 1996–1997 and 2000. A more grievous matter is the out-and-out distortion of data, of which some Member States are guilty. In such Member States, the autonomy of the national statistical offices is constrained by their dependence on the Ministry of Finance.

So far, the most obvious cases are Greece and Portugal. In March 2005, Greece provided an update to its Stability and Growth Programme, which revised the information for the preceding years. For example, the public deficit of 2003 was revised to 5.2

[24] The German and French situations are not identical, for Germany has clearly acted more within the spirit of the Stability and Growth Pact and has endeavoured to reduce its deficit, while France has taken – for reasons having to do with domestic politics and the prevailing administrative culture – a less proactive approach to deficit reduction.

percent of GDP from 3.8 percent. Public debt was reported as 109.3 percent of GDP, an increase of 7.6 percentage points over that reported earlier. In the case of Portugal, the deficit criteria were fulfilled "formally" only: the effective deficit ranged between 5 and 6 percent. These observations led to a clarification of Eurostat's status and to the introduction of legislation underscoring the independence of statistical authorities.

All of the above factors – deviation from concluded agreements, the issuing of decisions that run counter to the clarification of the courts' status, and creative accounting – were quite unfortunate when it comes to EMU and the Stability and Growth Pact. At the same time, it must be stated – as Ilkka Kajaste and Marja Paavonen have done[25] – that the Stability and Growth Pact has been a success in that many of its goals have been realised. According to Kajaste and Paavonen, the Pact has resulted in a stable European economy and growth-friendly economic policy, EMU has not proved a straitjacket for the Member States, and – perhaps most importantly – the growth-promoting economic policy has been targeted at structural factors that slow down economic growth in the Member States. With their high debt burdens, Italy and Belgium, in particular, have clearly benefited from their membership in EMU. At the same time, the abovementioned negative factors have also been significant enough to prompt the Member States to revise the regulations underlying the Stability and Growth Pact.

8.3 The reformed Stability and Growth Pact

After a lengthy deliberative process, the European Council in March 2005 decided to implement measures designed to strengthen the credibility of Economic and Monetary Union. In the run-up to the meeting, there was an extensive debate on whether certain public expenditures could be defined as investments and thus be exempted from the deficit criterion. Leaving development aid funding outside the scope of the criterion was also discussed. In the end, however, the European Council decided not to exempt any expenditures from the EMU criteria.

In line with these decisions, the finance ministers agreed in summer 2005 on a reform of the regulations relating to the Stability and Growth Pact. Regulation 1466/97 was amended by Regulation 1055/05 and Regulation 1467/97 by Regulation 1056/05. The main changes involved the adoption of a more favourable attitude to costs arising from short-run measures aimed at strengthening long-term sustainability.

> The Council agrees that an excess close to the reference value which reflects the implementation of pension reforms introducing a multi-pillar system that includes a mandatory, fully funded pillar should be considered carefully.

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[25] In weighing the pros and cons of EMU, we have drawn on a PowerPoint presentation prepared by deputy department head Ilkka Kajaste and financial secretary Marja Paavonen, which is dated 24.8.2005 and which Ilkka Kajaste kindly made available to us. Kajaste and Paavonen also analyse the shortcomings of the Stability and Growth Pact, but their approach is more inclusive than the one we pursue in this study, which is focused on social policy.

> Although the implementation of these reforms leads to a short-term
> deterioration of the budgetary position, the long-term sustainability of public
> finances clearly improves.

It is worth noting that a first-pillar, fully funded pension system appears to be a contradiction in terms. The net cost of the reform will be taken into account for five years starting from when a Member State has implemented a fully funded compulsory system, or for five years starting from 2004 in the case of Member States having already implemented such a system. The net cost will also be taken into account retrospectively; i.e., over a period of five years, the net cost for the public pillar will be taken into account, successively, to 100, 80, 60, 40 and 20 percent. The Council also disallowed the creative accounting practice of using financial windfalls as a corrective measure. Member States with an excessive deficit are expected to implement corrective measures meeting at least a reference of level of 0.5% of GDP corrected for cyclical variations and not including one-off measures. Public expenditures are, therefore, to be reduced or public revenues increased to meet the structural deficit criterion. At the same time, this gives more leeway to reduce cyclical deficits.

The revised Regulation also leaves the Commission more room for discretion in evaluating the factors influencing deficits. The Commission can better take into account factors related to the implementation of the Lisbon Strategy. In particular, investments in research and development policy and in innovations are to be considered as positive factors. The Commission can also acknowledge any previous steps taken during economically favourable periods to stabilise the public finances. The idea behind this is to recognise Member States that have previously shown their commitment to the common rules. Finally, the evaluation must take in the costs of both international and intra-European solidarity. The former refers to development aid and the latter to such expenditures as the German reunification costs and the possible public costs of structural changes resulting from the creation of the internal market.

To summarise, from a social and health policy perspective the revised Stability and Growth Pact is better than its predecessor when it comes to the room for manoeuvre within the public finances. It strengthens the long-term sustainability of the public finances, which in turn provides more flexibility in social policy in a time when the population is aging and the tax base and the volume of social security contributions are impacted by globalisation. The challenge is that the reformed Pact may (again) dictate politically difficult structural reforms, which are in turn tied in with the incentive systems and the ways in which public services are organised. This could involve reducing the share of government funding and thereby alleviating the cost pressures on the public finances. This would create new and – from the perspective of social policy – often quite challenging lines of division in social policy. Such reforms are a particular challenge for countries like Finland where the concept of social policy is quite extensive due to a residence-based model of social security and uncapped social insurance benefits. In such systems, prefunded pension systems that are off the

public budget create a new line of division alongside the existing one between basic subsistence security and employment-related social security.

Of the new Member States which joined the European Union in May 2004 (the so-called EU10), none has so far joined or been able to join Economic and Monetary Union, because they do not meet the requirements for EMU membership in terms of their public finances and money markets. Still, all are seeking membership in EMU, and none has expressed formal reservations concerning membership. Having made swift progress in meeting the membership criteria, Estonia, Lithuania and Slovenia will be the first new Member States to join Economic and Monetary Union. They will be followed by several smaller EU10 countries, though not until the turn of the decade.

It remains clear that the countries committed to the Stability and Growth Pact and those seeking EMU membership do not comprise a single uniform group when it comes to the stability of their public finances. Based on the analysis by Kajaste and Paasonen referred to above, the risks facing the sustainability of public finances can be broken down as follows:

– Ten countries (Belgium, the Czech Republic, Germany, Greece, France, Italy, Cyprus, Hungary, Malta and Slovenia) face major risks to long-term sustainability.

– Seven countries (Poland, Slovakia, Spain, the Netherlands, the United Kingdom, Lithuania and Latvia) face risks concerning long-term development, pension reforms and the cost effect of demographic aging.

– Only in seven countries (Ireland, Denmark, Finland, Austria, Luxembourg, Sweden and Estonia) are sustainability risks considered to be minor, even if the cost effect of demographic aging is a challenge.

Most of the European Union population lives in countries belonging to the first or second group. In view of this, it is obvious that Europe needs all the growth and employment that can mustered in order to sustain its public finances and the Stability and Growth Pact. Viewed from this perspective, there is no conflict between social policy and Economic and Monetary Union. The results help us to understand better the reformed structure and objectives of the Lisbon Strategy (2005), which emphasise the promotion of growth and employment. The challenge now is that the structural reforms called for by the strategy are not as appealing to EU citizens as the benefits and services promoting their welfare and security to which they are already entitled.

8.4 The Draft Constitution and Economic and Monetary Union

In June 2004, the heads of state and government of the Member States adopted a draft proposal for the EU Constitution. By autumn 2005, the fate of the Constitution was

hanging in the balance, because the Dutch and French populations had turned down the Constitution in referendums held in May 1995. In practice, this will probably prevent the ratification of the Constitution in its current form. Still, it is interesting to consider what the Constitution would have meant for economic and monetary policy.

The Constitution would not affect the operating principles of Economic and Monetary Union, but it would highlight an interesting conflict between the common goals of the Union and the objectives of monetary policy. The change has occurred in the overall goal-setting of the Union and not in monetary policy. In accordance with the general goals included in the draft Constitution, the Union pursues the following objectives in its economic, employment and social policy (Article I-3) (emphasis added):

> 3. The Union shall work for the sustainable development of Europe based on balanced economic growth and price stability, *a highly competitive social market economy, aiming at full employment and social progress*, and a high level of protection and improvement of the quality of the environment. It shall promote scientific and technological advance.
>
> It shall promote economic, social and territorial cohesion, and solidarity among Member States.
>
> It shall respect its rich cultural and linguistic diversity, and shall ensure that Europe's cultural heritage is safeguarded and enhanced.

The reference to 'social market economy', italicised above, has drawn some attention. It relates to a long-running scholarly debate on the structure and institutions of the German social market economy and the operating principles of the capitalist society. It appears that another motivation for choosing this term was the desire to find an alternative acceptable to all interest groups (Hellsten 2005, 202).

In any case, as Christian Joerges and Florian Rödl (2004) have analysed, the term may also have real political significance for the deliberations concerning the future course for the Union; it may be seen as a step towards a stronger social Europe where social policy is moved up a notch or two in priority. This is also suggested by the new horizontal article III-117, which states that

> [i]n defining and implementing the policies and actions referred to in this Part, the Union shall take into account requirements linked to the promotion of a high level of employment, the guarantee of adequate social protection, the fight against social exclusion, and a high level of education, training and protection of human health.

The article does not mean that the Member States' prerogative vis-à-vis certain areas of policy is safeguarded (for details see Saari 2003), but rather that the Union must in all its policy-making take into account the interests referred to above, which goes for monetary policy as well. Without delving any deeper into this discussion, it is important to compare this policy-setting with that relating to monetary policy. It is enshrined not only in the price stability objective defined in Article I-3, but also in Article III-177. (This latter Article happens to be in the same Part as Article III-117 quoted above.) The objectives set out in Article III-177 are based on previous agreements (emphasis added):

> For the purposes set out in Article I-3, the activities of the Member States and the Union shall include, as provided in the Constitution, the adoption of an economic policy which is based on the close coordination of Member States' economic policies, on the internal market and on the definition of common objectives, and *conducted in accordance with the principle of an open market economy with free competition.*
>
> Concurrently with the foregoing, and as provided in the Constitution and in accordance with the procedures set out therein, these activities shall include a single currency, the euro, and the definition and conduct of a single monetary policy and exchange-rate policy, the primary objective of both of which shall be to maintain price stability and, without prejudice to this objective, to support general economic policies in the Union, *in accordance with the principle of an open market economy with free competition.*
>
> These activities of the Member States and the Union shall entail compliance with the following guiding principles: stable prices, sound public finances and monetary conditions and a stable balance of payments.

Here, the term 'social market economy' is no longer used, but rather monetary policy is to be "conducted in accordance with the principle of open market economy with free competition".

There is an obvious conflict between these two interpretations. As we noted above, following the negative outcome of the Dutch and French referendums, the draft proposal for the new Constitution is unlikely to become effective, at least not within the next few years. Hence, the conflict will not be actualised in the Union policy. However, if the Constitution should, after all, be ratified and the articles referred to here be left unchanged, it is possible that the EC Court of Justice will have to weigh these two interpretations against each other. This would be the case, for example, when compliance with the EMU provisions would call into question some of the underlying tenets of the social market economy, including the existence of comprehensive systems of social provision.

8.5 Topics for further research

Subsequent studies will have to determine to what extent, if any, the internal structure of social expenditure will change within the framework imposed by the Stability and Growth Pact criteria. The Stability and Growth Pact considers public finances essentially as a unified whole. According to the Protocol appended to the Maastricht Agreement (emphasis added):

> In order to ensure the effectiveness of the excessive deficit procedure, the governments of the Member States shall be responsible under this procedure for the deficits of general government as defined in the first indent of Article 2. *The Member States shall ensure that national procedures in the budgetary area enable them to meet their obligations in this area deriving from this Treaty.* The Member States shall report their planned and actual deficits and the levels of their debt promptly and regularly to the Commission.

One of the objectives of the Stability and Growth Pact is to bolster the sustainability of public finances at a time of aging populations and shrinking tax bases. Yet ultimate responsibility for the stability of public finances lies with the state government (and not the local governments or social security funds), which is in charge of implementing multilateral agreements. Consequently, the balance between income and expenditure in the state finances (i.e. deficit or surplus), which is the sector of public finances closest to the state, plays a decisive role when it comes to fulfilling the criteria of the Stability and Growth Pact.

By decision of Parliament, the Government can pass on the responsibility to implement measures necessary to reach stability in the public finances to the local governments and to social security funds, for example by amending the structure of taxation or the rates of social security contributions. It is worth pointing out as well that the public finances should be considered as a whole, as has been done in Finland, among other countries, since the economic depression of the early 1990s. Yet an approach that seeks to re-evaluate the role of local authorities and social security funds in the stability of the public finances is, politically speaking, a significantly rockier road than an approach aimed at reforming the structure of government finances. Therefore, the majority of the measures taken to stabilise public finances will – at least in the short term – focus on the government finances.

In the event of growing public deficits (e.g. as a result of population aging), where it becomes impossible to increase revenues significantly because of tax competition or tax reduction efforts, re-evaluation of state expenditure (and revenue) becomes a key issue. From the social policy perspective, the central question is what type of benefits and services are affected by such measures. To date, this has not been analysed. The statistical data available indicate that the state's share of overall public expenditure varies substantially from one country to another. This is largely also true for the tar-

geting of state expenditures within social spending. In a country such as Finland, the state's social expenditure takes the form of child benefits and other flat-rate benefits, local government subsidies, and employment-related pensions for state employees. In some other countries, state funding is directed more towards insurance-based provision. It appears likely that efforts to stabilise the state finances by curbing the increase of expenditure are targeted in different ways in different Member States. From the perspective of basic welfare benefits and services, Member States such as Finland are in a more precarious position than those where the state's share of the funding for such benefits and services is smaller.

The public financing models for services and income transfers will (likely) be decisive to any future, more detailed, assessment of the social policy impact of Economic and Monetary Union on different sectors of public finances. It is to be hoped that such an assessment will not be done in a situation where a re-evaluation of public expenditures is necessitated by fiscal deficits. That can be avoided if the Member States manage to meet the objectives of the revised Stability and Growth Pact in a way that will create sufficient room for public finances even if (potential) economic growth slows down as the population ages. If this fortunate outcome is reached, social policy-makers will be able to join other interest groups in thanking the originators of Economic and Monetary Union for their vision in shoring up the long-term financing of social policy. In the opposite case, an accusing finger will be pointed at a wider range of social actors, and if worse comes to worst, failure to balance public finances may even spell the end of European Economic and Monetary Union.

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APPENDIX FIGURES

Appendix figure 1. *The ratio of social expenditure, core government expenditure and debt interest payments to total public expenditure in 15 EU Member States, 1990–2001.*
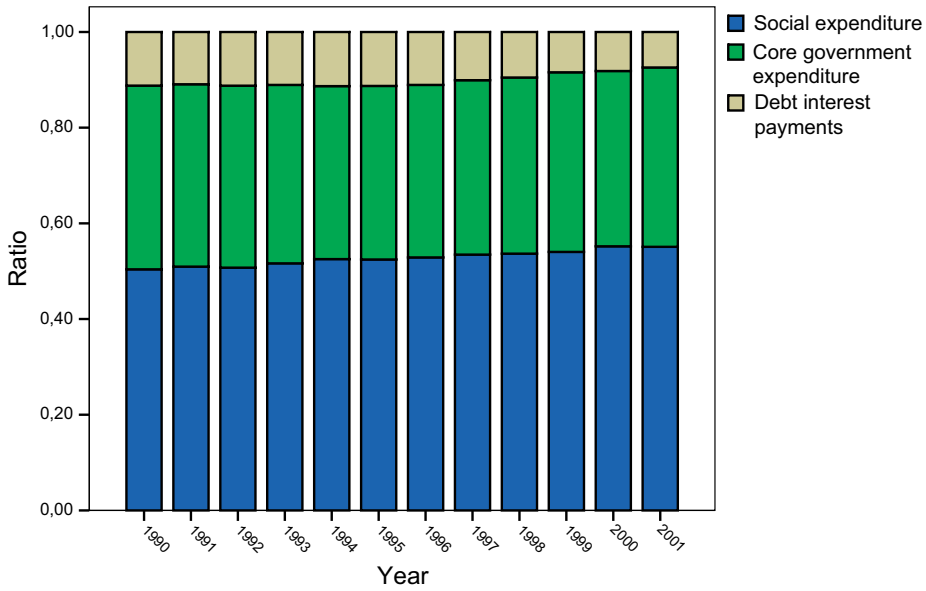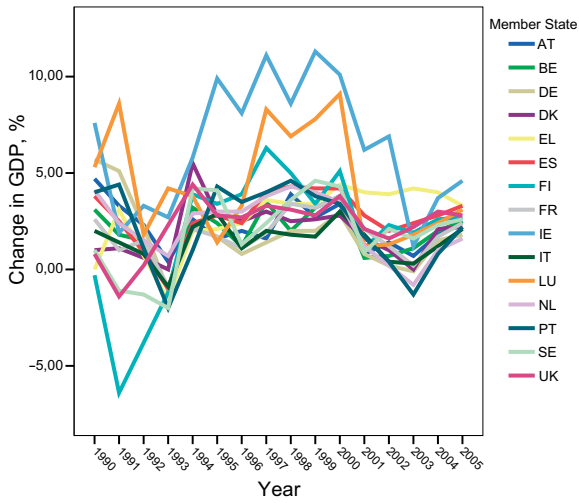

Source: OECD, Eurostat and authors' calculations.

Appendix figure 2. *Relative share of social expenditure (blue line) and core government expenditure (red line) of total public expenditure in 15 EU Member States, 1990–2001.*
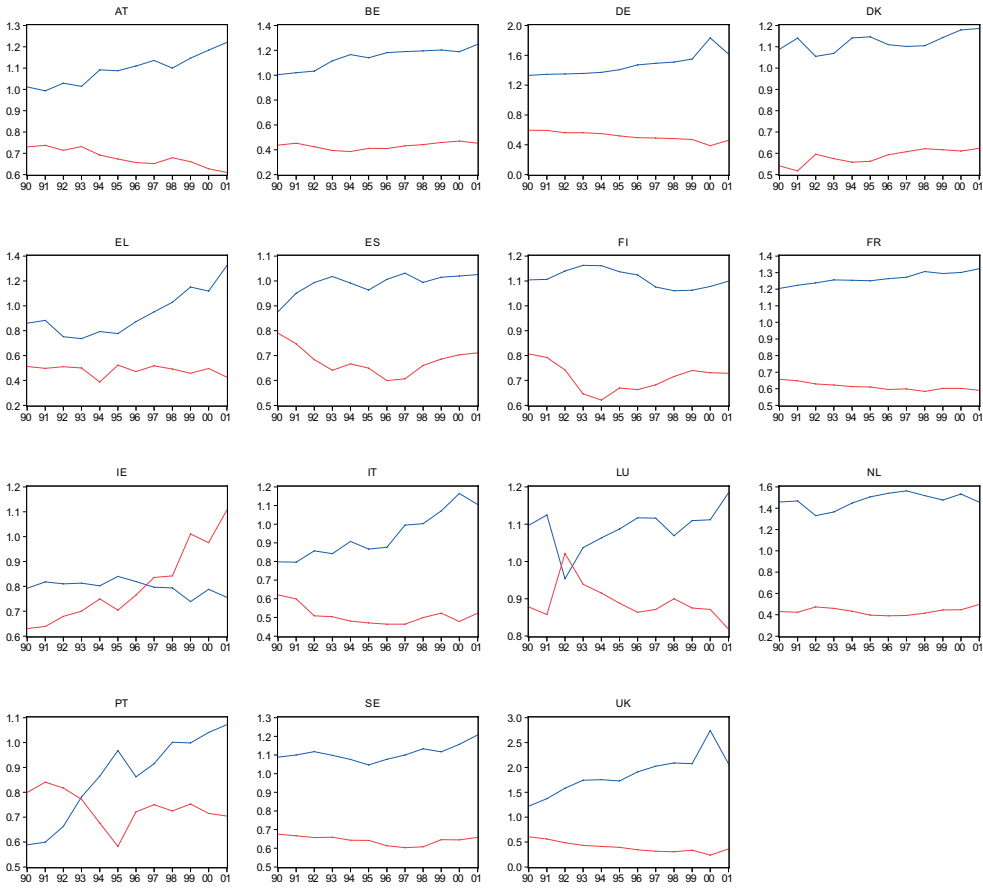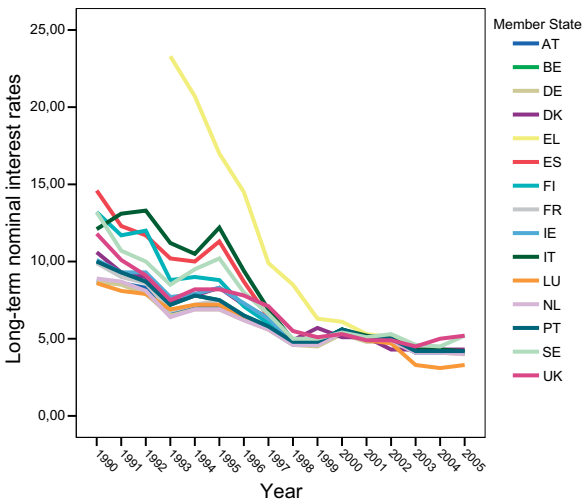
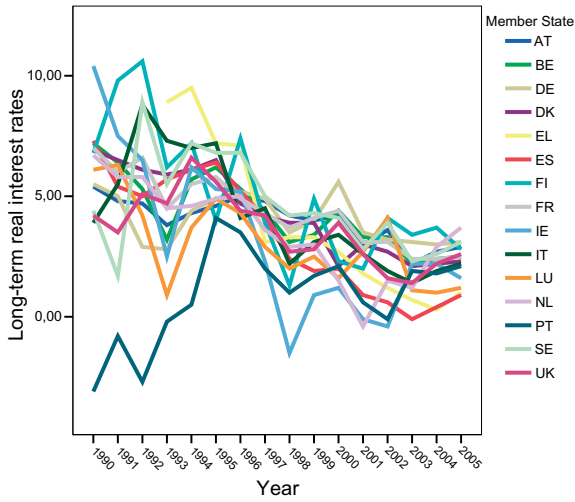*Appendix figure 3.* Changes in GDP, 1990–2005 (at 1995 prices). Year-on-year change, %.

Source: European Commission 2004b, table 10.

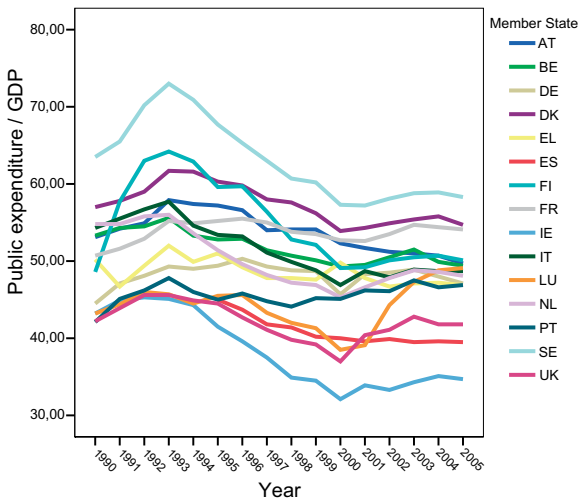*Appendix figure 4.* Long-term nominal interest rates, 1990–2005, %.

Source: European Commission 2004b, table 50; OECD 2004a, appendix table 35.

Appendix figure 5. Long-term real interest rates, GDP price deflated, 1990–2005, %.
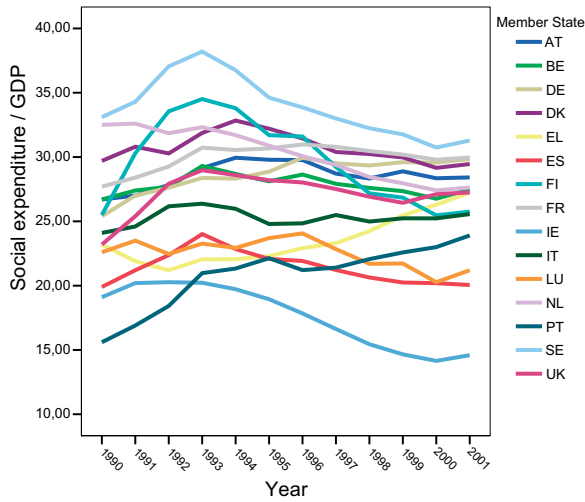

Source: European Commission 2004b, table 24; OECD 2004a, appendix table 35.

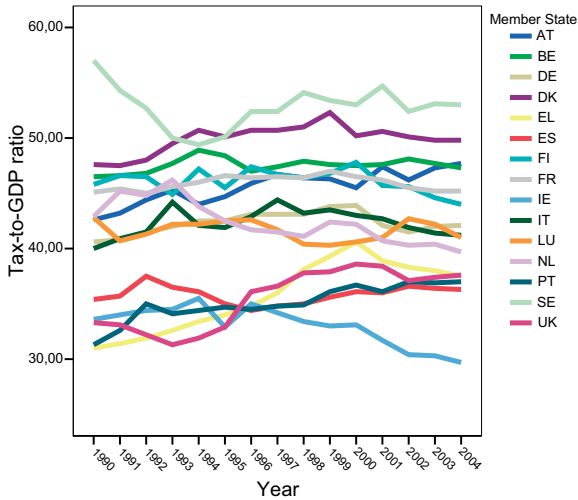*Appendix figure 6.* *Total public expenditure as a percentage of GDP, 1990–2005.*

Source: European Commission 2004b, table 74.

Appendix figure 7. Ratio of social expenditure to GDP, 1990–2001, %.
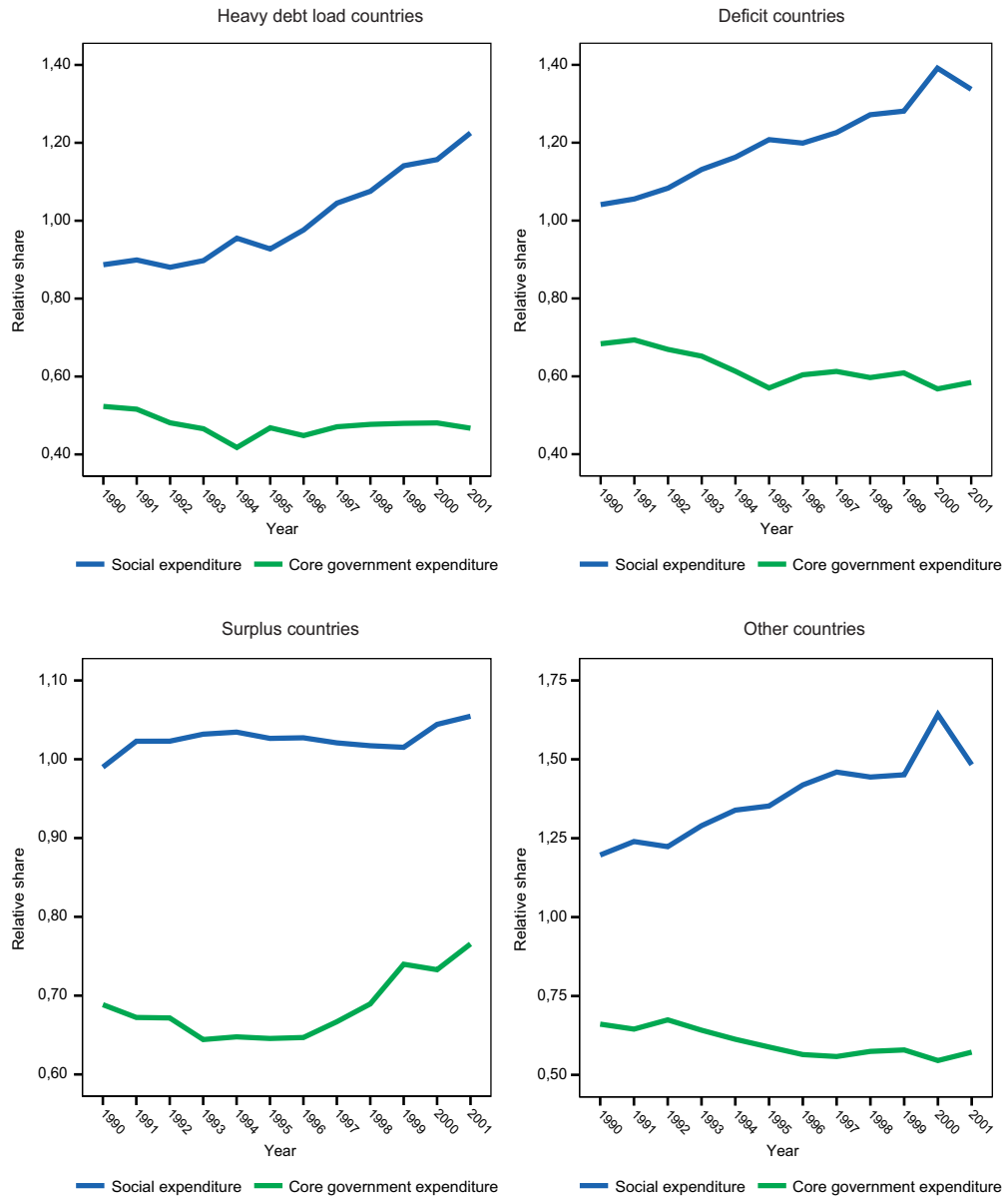

Source: Eurostat, Social protection expenditure and receipts, 1980–1997, 1992–2001.

Appendix figure 8. Tax-to-GDP ratio in 15 EU Member States, 1990–2004, %.

Source: European Commission 2003, table A.4.1.

Appendix figure 9. *Relative shares of social expenditure and core government expenditure in public expenditure, by country groups, 1990–2001.*

Appendix: Country abbreviations

Alphabetised by country		Alphabetised by abbreviation	
Austria	AT	AT	Austria
Belgium	BE	BE	Belgium
Cyprus	CY	CY	Cyprus
The Czech Republic	CZ	CZ	The Czech Republic
Denmark	DK	DE	Germany
Estonia	EE	DK	Denmark
Finland	FI	EE	Estonia
France	FR	EL	Greece
Germany	DE	ES	Spain
Greece	EL	FI	Finland
Hungary	HU	FR	France
Ireland	IE	HU	Hungary
Italy	IT	IE	Ireland
Latvia	LV	IT	Italy
Lithuania	LT	LT	Lithuania
Luxembourg	LU	LU	Luxembourg
Malta	MT	LV	Latvia
The Netherlands	NL	MT	Malta
Poland	PL	NL	The Netherlands
Portugal	PT	PL	Poland
Slovakia	SK	PT	Portugal
Slovenia	SI	SE	Sweden
Spain	ES	SI	Slovenia
Sweden	SE	SK	Slovakia
The United Kingdom	UK	UK	The United Kingdom

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