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**Does the Welfare State Keep a “High and Stable”
Level of Demand in Europe?**

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Abstract

The debate on the Welfare State is mainly focused on a supposed trade-off between growth and equity, more precisely, on the sustainability of social programmes and their effects on individual incentives to work and save. In this paper we focus on the relation between Welfare State and aggregate demand. The starting point is the claim that consumption levels in US are responsible for the high rate of growth of the economy during the period 1995-2000, and that the slowing down of consumption in Europe (both in absolute levels and comparatively to the US) is a major factor in explaining the poor performance of the EU countries.

We distinguish three effects through which the welfare state may affect demand for consumption: a “macroeconomic” effect, related to the stabilisation function of the public policy; a “crowding out” effect, induced by the “substitution” of private consumption with public expenditure; and an “income” effect caused by the fiscal austerity (both implemented and announced) imposed by the stability pact.

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1.Introduction: growth and Welfare State

The debate on social protection systems is focused on the supposed trade-off between growth and equity, more precisely, on the sustainability of social programmes and their effects on individual incentives to work and save. Indeed, if benefit systems discourage people from working, and social provisions substitute household saving, both the amount of labour supplied in the economy and of the capital available for reinvestment is lowered, so reducing the level of output and the level of capital investment and hence growth.

On the other hand, to the extent that such insurance enables individuals to take more risks in their economic behaviour, because they are, at least partially, insured against failure, the insurance afforded by social protection may encourage growth, assuming that there is a positive relationship between the riskiness of a project and its expected rate of return (Sinn, 1998). One could argue for instance (Barr, 2001) that an effectual system of unemployment compensation helps in sustaining labour mobility, thus assisting growth.

Social protection expenditures can be seen as “social investment”, or “productive factor”, to the extent that, for instance, they are aimed to prevent a group or class of society from falling so far behind the “average” that they are unable to participate in the market economy, causing permanent loss of potential output.

From the mid-1980s to the mid-1990s, a number of studies have found conflicting evidence about the influence of social protection on growth¹. The bulk of studies which have previously identified a positive causal effect between social protection expenditure and growth, often used a cross-sectional OLS approach. However, the cross-sectional association that they demonstrate, between greater social expenditure and growth, is effectively equivalent to observing that rich nations have Welfare States but poor countries do not, an elementary tautology which says nothing about whether social protection causes more rapid growth.

Arjona et al. (2002), using a panel data-set on 21 OECD countries covering the period from 1970 to 1998, find evidences that more social protection expenditure reduces output, although the effect is not large. In interpreting this result, the suggestion that different sorts of social expenditure have different effects on growth proves to be important. The estimates in this study suggest that more “active” spending² (i.e. social spending which attempts to change the distribution of market

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¹ See Arjona *et al.* (2002), for a wide review.

² Active Labour Market Programmes (ALMP) contains all social expenditure (other than education) which is aimed at the improvement of the beneficiaries’ prospect of finding gainful employment or to otherwise increase their earnings capacity. This category includes spending on public employment services and administration, labour market training, special programmes for youth when in transition from school to work, labour market programmes to provide or promote

income by promoting the labour market participation of part of the population that would have lower-than-normal market incomes) is associated with higher growth, whereas other social spending is associated with lower growth.

The (supposedly negative) effects of the welfare state on the supply side have been taken to explain the better performance in terms of growth rates and job creation of the US economy with respect to the European Union³ over the 1990s (table 1). Among the causes of the superior dynamics of the US supply-side potential the following have been identified: a) a higher “technological capability” of the US productive system, which is characterised by a faster and more pervasive process of adoption/diffusion of new technologies; b) a more efficient allocation of factor inputs, due to a higher mobility/flexibility of the labour market and to the better ability of the capital market to support the innovation process of the economy as a whole; c) a higher degree of “competition”, which contributes to the diffusion of innovations and enhances the efficiency of the allocative mechanism.

The poorer European performance is explained in terms of labour rigidity, insufficient market competition, excessive regulation. All these elements are seen as forces that encumber the modernisation and the adjustment of the economy, or alternatively, as factors that create negative externalities for the economic environment.

An interpretation of differing growth and employment performances exclusively based on supply-side factors appears to us unsatisfactory since differences in the dynamics of demand-side factors also contributed to the overall macroeconomic outcomes. Among such factors, the following seem to be of particular relevance (Simonazzi, 2003): a) the investment boom led by the Information and Communication Technology (ICT) innovation b) the European fiscal consolidation setting targets and rules which reduce the possibility of stabilising domestic demand; c) a higher propensity to consume and a higher level of consumption in the US; d) a greater European reliance on exports (which subjects its economy to global demand fluctuations).

The low level of internal demand, which contributes to the stagnating prospects in the labour and products markets, is at least partly explained by the differences in economic policies, as proved by the latest recession. Since 2001, in the face of recession, the Fed has aggressively cut rates, while the Bush administration implemented a massive tax reduction. In Europe, conversely, the European Central Bank has been much more hesitant in cutting interest rates, while fiscal policy has been

employment for unemployed and other persons (excluding young and disabled persons) and special programmes for the disabled.

³ We refer here to “Europe” as a whole, though the various countries have gone through very different experiences, as we shall see.

constrained by the Stability and Growth Pact. Thus, while in the US the swing of the budget from surplus to deficit in 2000-2003 is mainly due to changes in policy, in the Euro area it is mostly due to the weakness of the economy. Finally, the dollar depreciation vis-à-vis the Euro has sustained the competitiveness of US domestic production, while causing lower competitiveness and further contraction in Europe. Given the role of net exports in supporting effective demand in Europe, the Euro appreciation has played a relevant role in the slow down of the rate of growth of GDP: according to some estimates, a 10% appreciation would lead to a 0.6% decrease in GDP (Blanchard, 2003).

It has been observed (Simonazzi and Vianello, 2001) that there may be a relation between the macroeconomic policy stance and the Welfare State regime: because of the low protection offered by the Welfare State, the US economy cannot endure persistent periods of low growth and high unemployment. According to this interpretation, the existence of a safety net, through the public provision of basic goods, such as health, education, Social Security, or through a more generous policy of income support, elicits a lower commitment to full employment of European governments, while relying on the greater impact of the automatic stabilizers to perform an anti-cyclical function.

A different, though related, issue is whether (and how) the presence of the Welfare State affects consumption behaviour, and how fiscal consolidation is likely to affect consumption and aggregate demand.

2. Social expenditure and Welfare State

The Welfare State function is one of insuring individuals against risks (like sickness in the case of elderly people, unemployment in case of recession) and to provide goods and services (health, education, Social Security) that the market would not produce at prices affordable to the majority of the population (Artoni, 2004; Barr, 1992)⁴.

According to the usual classification of Welfare State model (Esping-Andersen, 1990, Ferrera, 1998, Esping-Andersen et al., 2002), Denmark, Finland, Norway and Sweden are representative of the “social democratic” welfare system in which individuals are favoured over families and social policies are universal, providing high levels of benefit and services, funded by relatively high

⁴ The Social protection policy area are: old age, survivors, incapacity-related benefits, health, family, active labour market programmes, unemployment, housing and other social policy areas. This category includes social expenditure (both in cash and in kind) for those people who, for various reasons, fall outside the scope of the relevant programme covering a particular contingency, or if this other benefit is insufficient to meet their needs. Social expenditure related to immigrants/refugees and indigenous people are separately recorded in this category. Finally, any social expenditure which is not attributable to other categories is included in the sub-category other. For more detailed information regarding the categorization of social expenditure, see the Employment Outlook, OECD, 2002, www.oecd.org/els/employmentoutlook.

levels of taxation. Ireland, the UK and the US represent the “liberal” welfare typology, with limited state provision, characterised by mean testing of publicly provided services and by mainly private provision for the non poor. Austria, Belgium, France, Germany and Netherlands (which also shares many features of the Scandinavian model) represent the conservative “corporatist” tradition, said to be characterised by status-preserving intervention which safeguard the model of family supported by benefits and taxation. Finally Greece, Italy, Portugal and Spain are characterised by minimal welfare policies, reliance on family solidarity, and a large informal sector⁵.

This distinction can be illustrated by classifying the countries in relation to the three main instruments of social protection, namely: a) public spending programs; b) tax expenditures; and c) particular forms of regulations (Tanzi 2004, table 2).

Public social expenditure is traditionally higher in Nordic countries and in continental Europe than in the US. However, as evidenced by table 4, cross-country comparisons of the extent of social protection cannot be based only on standard data on budgetary allocations to social spending. First of all, the net value of the gross social expenditure may be considerably reduced by taxation of cash benefits, as in the case of Nordic countries. Second, gross expenditure does not account for transfers which, although compulsory and motivated by social concerns, are not paid by the government (Adema, 1997). Thirdly, the notion of social spending has to be extended to cover also voluntary social spending by the private sector (Adema, 2000), since governments may encourage employers and individuals to take up private insurances by granting tax advantages whose value can be considerable. Since the purchaser faces a price which is different from the one which would prevail in the absence of the tax advantage, governments introduce an element of interpersonal redistribution in these programmes. Accounting for voluntary private social benefits and direct and indirect taxation levied on such benefits enables the quantification of the “net total social expenditure”, which represents the share of an economy’s domestic production devoted to social expenditure.

Comparing 11 OECD countries for which comprehensive data are available, Adema (2000) finds that in 1995 the standard deviation of gross public social expenditure as a share of GDP was 7.2, but it was only 2.8 for net total social expenditure. It follows that any conclusion (or economic exercise) based on social expenditure levels across countries that do not account for private social benefits and the impact of the tax system is likely to be misleading. In particular, while gross public social spending to GDP ratios in the Nordic countries is approximately double the amount of the US, figures are roughly comparable when net total social expenditure is considered. Table 4 re-

⁵ We are aware that no countries fit neatly into any of the Esping-Andersen’s welfare types. Nevertheless, this distinction is useful for illustrative purposes.

ports data drawn from Adema (1999) for 10 countries which are more relevant to our objectives. As mentioned above, there are, of course, relevant redistribution effects.

An obvious implication of the different way in which some “merit goods”⁶ are provided is that countries with a more developed Welfare State will have a lower share of private consumption, and a lower share of disposable income. However, *actual individual consumption*, which represents the value of the consumption goods and services acquired by households, whether from the market or through public provision, is much more similar across countries. Table 5 reports household and actual individual final consumption in percentage of GDP. Household final consumption (column [a]) in the UK and, especially, the US is significantly higher than in most European countries. This is particularly evident when we contrast the US with the Scandinavian countries. When looking at the actual individual final consumption (column [b]), however, differences between European economies (in particular the Nordic countries) and the US become smaller, due to the greater weight of “transfers”. The difference between column [a] and column [b] provides information about the government individual consumption across years. Between 1990 and 2003, in the US, federal government individual consumption has been, on average, about 6.5 % of GDP which compares with an average of 17.6% in Denmark and with 11-12% of GDP in the remaining countries. Over the period under examination, the share of transfers in kind in GDP has remained approximately unchanged in most countries (or it has slightly increased, as in Denmark). Also the ratio between government individual consumption and household final consumption has remained roughly unchanged overtime and across countries. These data are in line with the results obtained by Fiorito and Kolintzas (2004) who have analysed the pattern of total government expenditure in twelve European Union countries, over the 1970s and until the early 1990s. The higher fiscal discipline imposed by the increased costs of debt financing did not curbe the increase in general government spending but changed its composition: the share of government consumption and especially fixed investment expenditures fell to the benefit of transfers⁷ (with the exception of Italy), which became, in most cases, the largest spending component, and interest payments (which however fell in the late 1990s). In terms of the functional classification of governments spending, the provision of public

⁶ Government expenditure can be summarized in three major categories:

A. Traditional Domain, which corresponds to the provision of public goods such as defense, public order, justice, etc.

B. Welfare State Domain, which in turn is made up by two subcategories:

i) Merit Goods, such as education and health services.

ii) Income Maintenance Programs, that include Social Security benefits and many other cash benefits for the eligible recipients (disability, injury, sickness, unemployment, housing benefits, etc.)

C. Mixed Economy interventions which mostly amount to infrastructure spending (Economic services) and to interest payments on the outstanding general government debt.

Government final consumption expenditure may be divided into government expenditure on individual consumption goods and services and government expenditure on collective consumption services (merit goods).

⁷ It is worth noting that the bulk of transfers consists of Social Security benefits.

goods has remained roughly unchanged, with most of the increase associated with the Welfare State, and a relatively small increase in the merit goods. (the merit good component is by far the largest item, with education and health accounting for about 4/5 of the merit goods aggregate).

We can draw three main implications:

1. Up to now, it does not seem that the fiscal retrenchment has led to large changes in the weight of welfare state expenditure yet; this may be simply the effect of the low rate of growth of income, and the operation of the automatic stabilisers; moreover one should consider the net total social expenditure, to account for possible increases in taxation;
2. crowding out: cuts in public social spending may actually induce increases in private spending, if the private and public goods are good substitutes;
3. the elasticity of substitution may be lower than one if some consumers are income constrained. In the latter case, we may have a substitution within the private consumption bundle and/or risks of social exclusion (e.g., health, pensions, etc.).

Thus changes in the welfare state may entail considerable distribution effects and their impact on aggregate demand depends on the response of private consumption to disposable income.

3. Consumer behaviour

3.1 Effects on the propensity to consume

The basic idea of the life-cycle model (Modigliani and Brumberg, 1954, 1979) is that households and individuals attempt to smooth consumption over time, so that workers save in order to provide themselves a shelter in retirement. Probably, the most important implication of this model is that, at the macro level, high aggregate saving is associated with population and income growth. This result is due to aggregation rather than to the behaviour of agents. When population grows, there are more savers compared with dissavers, because of an age structure effect, so that the economy displays a higher aggregate saving rate than one with a static population. When the economy grows, dissavers' assets are accumulated out of incomes lower than those earned by current workers, thus resulting in a higher aggregate saving rate. However, in presence of higher expected real per capita income growth, young generations are in the position to augment their current spending, if they can borrow, thus partially offsetting the higher saving rate which derives from the working population. Cross-country studies show evidence of a positive correlation of saving rates with income or population growth, or a young age structure (Modigliani, 1990; Deaton, 1992).

Analyses based on household survey data however offer convincing evidence against the life-cycle theory. Cross-section surveys show that consumption tends to track income over the life-cycle more closely than the theory implies. Credit constraints, precautionary behaviour under uncertainty, consumption habits and variation of needs over the life-cycle, especially related to child rearing are among the most common reasons offered by the literature (Muellbauer 1994, p. 10; Carroll and Summers, 1991; Deaton, 1992; Banks et al., 1993). Besides, the elderly people do not dissave on the scale predicted by the life-cycle theory, uncertainty about income, needs and length of life and the bequest motive being among the most common explanations (Kotlikoff and Summers, 1981; Kotlikoff, 1988).

Uncertainty introduces the presence of a precautionary element in saving decisions. According to the “buffer-stock theory of saving” (Carroll, 1992; Deaton, 1992), households hold assets in order to protect consumption against unexpected changes in income. Hence, income uncertainty could have the effect of raising savings. One important implication of the precautionary motive is that future income is very heavily discounted, thus making current income to play a bigger role in consumer’s decision. This may provide yet another explanation for the evidence that consumption tracks income more closely than predicted by the theory, especially for the young generations without a cushion of assets.

The life-cycle theory implies a negative link between the welfare state and aggregate savings. For instance, a higher level of pension provisions has the effect of diminishing private saving out of after-tax income (Feldstein, 1977, 1980). (A different argument relates to the discouraging effects on savings of means-tested social programs of income support; thus it has been argued that welfare benefits targeted to households with assets below a certain threshold (Hubbard *et al.* 1993) or means tested college scholarships (Feldstein 1995) might discourage the accumulation of assets).

Once accounting for uncertainty, risk-averse behaviour provides one more argument in favour of the inverse relationship between the welfare state and the level of household savings. By providing insurance against risk, and thereby reducing uncertainty, income and health safety-nets and market regulation could help explain the decline in saving rates observed in many industrial countries since the 1980s⁸.

Conversely, cuts in social expenditure⁹ or even threats of retrenchment in welfare state provisions, should have the effect of increasing the saving rate. In many countries however, the saving

⁸ Bosworth et al. (1991) argue that more widespread ownership of pension and insurance plans as well as improved regulation of pensions schemes may have reduced income uncertainty in the US. Along the same lines, Muellbauer (1994) argues that in the UK income uncertainty has fallen in the 1980s.

⁹ Since 1993 in the European Union Social Expenditure has slowed down. From 1995 to 2000, Social Expenditure in EU (in percentage of GDP) has decreased by 1%, reaching a peak in Finland (-6.4%) and Ireland (-3.7%), in part as a consequence of the restructuring of some expenditure categories (Zolli, 2004).

rate has continued to decrease (figures 5 to 7). Italy provides a good example. In the 1990s, the Italian government passed three successive pension reforms (in 1992, 1995, and 1997), which had the effect of reducing the replacement rate¹⁰ and increasing the retirement age, thereby resulting in a reduction of pension wealth. The impact was different across cohorts, with the replacement rate of young workers falling relative to older cohorts. Jappelli *et al.* (2004) analyse the effects of these reforms on private saving (over the period 1989-2000). They find that pension reforms indeed affected expectations of retirement benefits, but had only limited impact on savings (and private accumulation). The authors explain the lack of effects in terms of myopic behaviour: a limited revision in expectations and a delay in adjustment in expectations to the new pension regime by the vast majority of individuals.

3.2 Substitution and income effects

The analysis of the effects of cuts in social security is part of a broader debate on the effects of changes in fiscal policy on economic aggregates. These effects depend on the relationship between government and private consumption (Barro, 1981). The claim that compensating shifts in private saving can make fiscal contraction expansionary has been instrumental in the argument in favour of fiscal consolidations. Not only was the welfare state harming efficiency, but its curtailment was not going to be detrimental to demand.

The evidence in favour of these non-keynesian effects, however, is contradictory. Even in those cases where fiscal consolidation seemed to have provided room for private expenditure, other factors were probably more important (OECD 2004)¹¹. Moreover, this response will depend on composition effects - taxation, public spending, public investment having different effects on consumption - and on whether there exists substitution between government and private consumption expenditure.

There are two views (Levaggi, 1998): a) fiscal neutrality: public goods are perfect substitute for private goods, so that an increase in government expenditure will result in a “crowding out” effect of private consumption; b) Keynesian view: due to income redistribution effects or fiscal illusion, consumers perceive an increase in their disposable income and if this increase is expected to be permanent, this will produce an increase in private spending.

As for fiscal neutrality, once again the evidence is controversial. Ahmed (1986) for the UK and Bean (1986) for the US find evidence of substitution effects between private and public consumption, while Karras (1994) in a cross-country analysis finds evidence of complementarity. As

¹⁰ The expected ratio of pension benefits to pre-retirement earnings.

noted by Ni (1994), results are very sensitive to the choice of the utility function and the interest rate measurement. Moreover, as argued above, some components of government expenditures are likely to be complements, and others substitutes, to private consumption. Evans and Karras (1998) for instance find that private consumption and non-military government spending are generally substitutes or independent, while private consumption and military spending display a relationship of complementarity. These results suggest the need for a distinction between “public goods” (defense, public order and justice), and “merit goods” (health, education and other services that can be provided privately). While public goods are to a great extent non-rival in consumption, merit goods tend to be rival and their positive externalities depend mainly on distributional and demographic characteristics.

Fiorito and Kollintzas (2004), take up this distinction and investigate the relation between public and merit goods and private consumption for twelve EU countries from 1970 to 1996. They find that public goods substitute, while merit goods complement private consumption. They suggest two possible explanations: inefficiency, when complementarity occurs within the same spending category (for instance, demand for private tutors may increase if the quality of public schools is deemed inadequate, or costs need to be incurred in order to obtain the services, *e.g.* time lost in lines, applications, etc.; this implies that private and merit goods are not perfect substitutes) and positive externalities, when the relation is between spending categories (for instance, if public schools or public health improve the consumption of other private goods, as in the case of more educated people increasing their demand for books, magazines, etc., or, more generally, earning higher incomes and, consequently, being allowed to spend more. Similarly, healthier people are able to engage in more amenity spending).

The positive relation between merit goods and private goods turns out to be stronger than the negative one between public goods and private goods: since merit goods represent about two thirds of government spending, this implies that in the aggregate government spending complements private consumption, at least in the European case.

Finally, Levaggi (1998) introduces income distribution. Focusing on the Italian case he finds that consumers perceive public spending differently according to their income levels. Consumers with high earnings do not modify their consumption patterns in response to a change in the public provision of merit goods. For lower income groups an increase in production of public goods will raise consumption, *via* indirect complementarity between private and public goods. Hence, an in-

¹¹ In the two most famous cases, the Danish fiscal consolidation of 1983-86 and the Irish post-1987 stabilisation program, the fiscal retrenching was preceded by the depreciation of the exchange rate.

come effect might be detected, since the provision of public goods allows them to spend more on private consumption.

4. Consumption growth

4.1 The data

During the 1990s growth in consumption¹² has been consistently stronger in the US (and the UK) than in the major European economies (Germany, France and Italy). Medium-sized European economies (and especially Ireland), have enjoyed relatively strong consumption growth rates in the second half of the 1990s (figures 1 to 4). As one would expect, there is a strong positive correlation between rates of growth of GDP and final consumption (table 2), (with the exception of Portugal and Norway)¹³.

The propensity to consume¹⁴ (final consumption expenditure in percentage of disposable income), is on the rise in all countries during the 1990s, (France being the only exception), but differences remain concerning its value (figures 5 to 7; table 3, column [a]). Two groups can be identified: the UK, the US¹⁵ and the Scandinavian countries (plus Netherlands) have values consistently above 0.9, while the largest continental countries start from levels far below, and only reach this threshold by the turn of the century. Italy in particular has staged an astounding 15 percentage points increase since the 1980s, which has placed it within the core European countries, (starting from the lowest level). Finally, the UK, Netherlands and the Scandinavian countries present a marked cyclical pattern, going through a boom-to-bust cycle during the 1980s (and 1990s?).

The value of the propensity to consume reflects the choice of the definition of disposable income and of final consumption (ISAE, 2004). We have adjusted the usual definition to account for the different regime in the provision of “merit good” (section 2 above). The inclusion of the social

¹² Final consumption includes expenditure by both household and non-profit institutions serving households (NPHIS). Although it is preferable to employ household figures, for many countries are available only data on households and NPISHs, the so-called “personal sector”. For the sake of comparison, we have used personal sector data even for those countries for which household data are available. However, the inclusion of NPISH expenditure affects only marginally overall results.

¹³ Correlation coefficients are computed from 1992 on, because until 1991 data are not available for all countries.

¹⁴ Values exceeding 100 are partly due to the fact that, according to the System of National Accounts rules (hereafter SNA93), realised capital gains are not included in household disposable income, while taxes on capital gains are fully deducted. The rationale is that these receipts are too much volatile.

¹⁵ National Account rules in the US are slightly different from those of SNA93 adopted by the other countries here reviewed. In particular, according to the National Income and Product Accounts (NIPA) rules, adopted by the US, disposable personal income is split into personal saving and personal outlays, which include the following:

- personal consumption expenditures (i.e., spending on food, housing, clothing, household operations such as utility bills, transportation, and medical care).
- consumer interest payments (i.e., payments of credit card interest).
- personal current transfer payments.

transfers in kind received by NPISHs¹⁶ and the government affects the level of the propensity to consume (computed as the ratio of actual individual consumption to adjusted disposable income), but not its dynamic. Since by definition transfers in kind have an unitary propensity to consume, (consumption and disposable income are augmented by the same amount), the adjusted propensity to consume is higher than the propensity to consume when the latter is less than 100, and it is lower when propensity to consume exceeds 100 (table 3, column [b]). Thus, it has the effect of smoothing of the fluctuation of the propensity to consume.

Whatever effect the welfare state, and its retrenchment, might have had on the propensity to consume, other factors seem to have prevailed in affecting consumption behaviour. Among these, the wealth effect, which influences the exogenous component of consumption, has been hailed as the factor that saved the day in the aftermath of the stock market collapse. Another factor, income distribution, is creeping in on the wave of the direct and indirect effects of the fiscal retrenchment.

4.2 *Wealth effect*

The rapid increase in household propensity to consume observed in most OECD countries in the 1990s has coincided with an unprecedented increase in household net wealth¹⁷. This has raised the question of the role played by wealth on consumption.

The impact of wealth on consumption is likely to vary with the type of wealth and with its concentration. As for composition, wealth may be distinguished in real and financial assets, and these may differ because of a series of reasons: liquidity, volatility, channels of financing (i.e., whether the asset has being acquired through savings or borrowing). Thus, it has been argued that real wealth effects may be larger than financial (stock market) effects¹⁸, and that stock market ef-

According to the SNA93 rules, consumer interest and personal current transfer payments are not included in the net disposable income (see Mead *et al.*, 2004). Hence, for the sake of comparison, we have deducted these two items from the disposable personal income.

¹⁶ Since we employ data on personal sector, transfers in kind received by NPISHs are already included in our definition of disposable income and final consumption.

¹⁷ Since the mid-1990s in the major industrialised countries, with the exception of Japan, stock markets have experienced a sharp increase followed by a contraction started in 2001. The patterns of share price were quite similar across countries. Broad share prices indices have declined by over 40% between 2000 and 2002 in the UK and the US, and by close of 50 % in the Euro area. Figures are drawn from Boone and Girouard (2002).

¹⁸ Case *et al.* (2002) find that housing wealth has a more significant impact on consumption than equity wealth. Their research is based on a pooled sample of 14 countries observed annually for various periods during the past 25 years and a panel of US states observed quarterly during the 1980s and 1990s. As for US states, they find that the housing wealth effect is twice as large as the stock-market effect. As for countries (including the US), they observe an even larger wealth effect from housing, while the stock market effect is negligible.

fects are larger in market-based systems, because consumers have access to deeper financial systems, that provide a greater liquidity (IMF, 2002, p. 79)¹⁹.

The empirical evidence seems to confirm these hypotheses²⁰; in particular, while for countries with market-based financial systems²¹ the rise in wealth is estimated to have had a sizeable impact on the saving rate, “in countries with bank-based financial systems, saving behaviour is not affected much by changes in equity wealth” (IMF 2002, p. 83; see also Bertaut 2002, and Paiella 2004 for Italy²²). In fact, despite a rapid appreciation in equity prices and an increase in equity ownership in continental European countries since 1995, equities remain a minor form of household wealth. Moreover these holdings still belong disproportionately to the high-income population (Boone and Girouard, 2002), traditionally thought to have the lowest propensity to consume out of wealth. In the case of Italy, Paiella (2004) observes that, given the very low estimated marginal propensity to consume out of real assets, the rapid increase in real estate prices since the end of the 1990s has affected only marginally household expenditure. This is due to the relative illiquidity of the real assets, which limits the scope to realise the capital gains, and to the strength of the bequest motive. Hence, the housing market effects prove to be even smaller than the financial market effects. However, when taking into account the concentration of income and wealth, one could argue in favour of an aggregate negative wealth effect: the shift in income distribution in favour of high-income brackets has favoured an increase in savings that, because of the still underdeveloped size of the financial market, has been disproportionately invested in the property market, thus pushing up prices and rents. While higher real wealth has not fuelled consumption, it has however reduced the real income of those paying rents, thus affecting their real consumption.

¹⁹Wealth effects could account for the cyclical patterns of the UK and of the Scandinavian countries, as well. Both in UK and in Scandinavia, the deregulation of financial markets occurred during the 1980s was not accompanied by a tax system reform which would have made borrowing less tax-advantaged (Muellbauer, 1994). This has exacerbated, especially in the Nordic countries, the early 1990s downturn (Berg, 1994).

²⁰Boone and Girouard (2002) use stock data on financial and housing wealth for six countries (G-7 with the exception of Germany, due the lack of data), and provide evidence of significant wealth effects across countries, though their size varies considerably across countries and assets form. By disaggregating wealth, they do not find a larger impact of housing wealth with respect to financial wealth, with the exception of Japan and Canada, where a significant housing wealth effect has been detected.

²¹Market-based economies are Ireland, the Netherlands, Sweden, the UK and the US, Australia and Canada. Bank-based economies are Belgium, Denmark, Finland, Norway, France, Germany, Italy, Spain and Japan (IMF 2002, p. 81).

²²Paiella (2004), using evidences based on the Bank of Italy’s financial accounts and on the SHIW, find that the increase in household wealth during the second half of the 1990s was due both to rising asset prices and to the high rates of savings of Italian households. On the whole, the rise in asset prices, especially in equity prices, had a small effect on consumption. Indeed, even though saving rates fell over the decade, they remained relatively high, and, in particular, those of stock-owners held essentially unchanged. Italian household marginal propensity to consume out of financial wealth is found to be comparable to that estimated for the US and other industrialised countries. On the other hand, Italian households own relatively little financial wealth, thus, the majority enjoyed modest capital gains despite the stock market boom. In addition, the propensity to consume out of financial wealth has tended to diminish as pension reforms have reduced household pension wealth.

4.3 Income distribution

Income inequality has been increasing since the 1980s in almost all OECD countries (Förster and Pearson, 2002). The increased dispersion of gross earnings has been identified as the main factor behind income inequality. Labour market and welfare reforms, low rates of growth and high unemployment have resulted in a decrease in the share of labour in national income, as well as an increase in the dispersion of earnings and in the share of low-paid jobs²³ (Brandolini *et al.*, 2001).

On the other hand, an increasing share of the family income is taken up by those items making up the “subsistence bundle” and displaying a low elasticity of demand. Atella and Rossi (2004)²⁴, find that between 2000 and 2002 in Italy, for median income classes, expenditures on “energy”, “transportation services”, “insurance”, “elderly and disabled assistance”, “education” and “health” have grown faster than total expenditure, reflecting both higher than average increases in market and public prices, and the constraints of a social expenditure unable to keep in step with changing needs of society.

As a result, an increasing number of households have become income constrained. Using data drawn from the SHIW survey for Italy, Jappelli and Checchi (2004) report that, from 1993 to 2003 the share of households with negative saving has remained unchanged. The author fails to remark, however, that this share had jumped by 10 percentage points during the recession of 1992-93, stabilising at that higher level thereafter.

5. Conclusions

The low level of consumption in Europe can be traced back primarily to the low rate of growth of the European economies, and to the policies implemented by central authorities.

Different configurations of the welfare state affect the composition of consumption and, by reducing uncertainty, consumer behaviour. Conversely, expectations of cuts to social expenditure, in particular the pension system, should raise saving rates and, correspondingly, reduce consumption. However, the saving rate has fallen in almost all countries since the 1990s. Wealth effects may have played a role in the US, the UK and the Scandinavian countries, where the cyclical pattern of consumption seems to follow the asset market tendency, but no similar role has been found for the major European continental countries.

We have argued that low rates of growth in disposable income and distributional effect might have been at work: an increasingly polarised income distribution has been combined with changing patterns and needs of consumption of a society characterised by an ageing population, an

²³ Increase in fixed-term contracts, part-time work and other forms of contingent work.

²⁴ Data are from the Survey of Family Budgets (SFB) carried out by Istat for the period 2000-2002.

increasing precariousness of labour relations, an increasing uncertainty on future incomes and transfers, and the actual or threatened reduction in public provision of goods and services. Income constraints, rather than consumers' myopia, might have more than compensated the negative effect on consumption of social expenditure retrenchment.

References

- Adema W.** (1997), "What Do Countries Really Spend on Social Policies? A Comparative Note", *OECD Economic Studies*, No. 28, pp. 153-167.
- Adema W.** (1999), "Net Social Expenditure", OECD, Labour Market and Social Policy Occasional Papers, No. 39.
- Adema W.** (2000), "Revisiting Real Social Spending Across Countries: A Brief Note", *OECD Economics Studies*, No.30, pp. 191-197.
- Ahmed S.** (1986), "Temporary and Permanent Government Spending in an Open Economy", *Journal of Monetary Economics*, 17, pp. 197-224.
- Arjona R., Ladaïque M., Pearson M.** (2002), "Social Protection and Growth", *OECD Economics Studies*, No.35, pp. 7-45.
- Artoni R.** (2004), "Stato Sociale", Università degli Studi di Milano "Luigi Bocconi", mimeo.
- Atella V., Rossi N.** (2004), "Le mani vuote. Una società con più costi e meno sussidi", *Il Mulino*, Anno LIII, No. 412, pp. 299-308.
- Banks J., Blundell R., Preston I.** (1993), "Life-cycle Allocations and the Consumption Costs of Children", *European Economic Review*, 38, pp. 1391-1410.
- Barr N.** (1992), "Economic Theory and the Welfare State: A Survey and Interpretation", *Journal of Economic Literature*, XXX, 2, pp. 741-803.
- Barr N.** (2001), *Economic Theory and the Welfare State*, Cheltenham, Northampton, MA. Edward Elgar Publishing.
- Barro R.J.** (1981), "Output Effects of Government Purchases", *Journal of Political Economy*, 89, pp. 1086-1121.
- Bean C.R.** (1986), "The Estimation of 'Surprise' Models and the 'Surprise' Consumption Function", *Review of Economic Studies*, 53, pp. 497-516.
- Berg L.** (1994), "Household savings and debts: The experience of the Nordic countries", *Oxford Review of Economic Policy*, vol. 10, No. 2, pp. 42-53.
- Bertaut C.C.** (2002), "Equity Prices, Household Wealth, and Consumption Growth in Foreign Industrial Countries: Wealth Effects in the 1990s", Board of the Governor of the Federal Reserve System, International Finance Discussion Papers, No. 724.

- Blanchard O.** (2003), "The Diverging Paths of the US and Europe", Lavoce.info, 10-06-2003 [www.lavoce.info].
- Boone L., Girouard N.** (2002), "The Stock Market, The Housing Market and Consumer Behaviour", *OECD Economics Studies*, No.35, pp.175-200.
- Brandolini A., Cipollone P., Sestito P.** (2001), "Earnings Dispersion, Low Pay and Household Poverty in Italy, 1977-1998", Banca d'Italia, Temi di discussione del Servizio Studi, No. 427.
- Carroll C.D.** (1992) "Buffer-stock Theory of Saving: Some Macroeconomic Evidence", *Brooking Papers on Economic Activity*, 2, pp. 61-156 (with discussion).
- Carroll C.D., Summers L.J.** (1991), "Consumption Growth Parallels Income Growth: Some New Evidence", in B.D. Bernheim and J.B. Shoven (eds.), *National Saving and Economic Performance*, Chicago, Chicago University Press for NBER, pp. 305-343.
- Case K., Quingley J., Shiller R.** (2001), "Comparing Wealth Effects: the Stock Market Versus the Housing Market", National Bureau Of Economic Research, Working Paper No. 8606.
- Deaton A.S.** (1992), *Understanding Consumption*, Oxford, Clarendon Press.
- Esping-Andersen G.** (1990), *The Three Worlds of Welfare Capitalism*, Oxford, Blackwell.
- Esping-Andersen G., Gallie D., Hemerijk A., Miles J.** (2002), *Why We Need a New Welfare State*, Oxford, Oxford University Press.
- Evans P., Karras G.** (1998), "Liquidity constraints and the substitutability between private and government consumption : the role of military and non-military spending", *Economic Inquiry*, 36 (2), pp. 203-214.
- Feldstein M.S.** (1977), "Social Security and Private Savings: International Evidence in an Extended Life-cycle Model", in M.S. Feldstein and R.P. Inman (eds.), *The Economics of Public Services*, London, Macmillan, pp.174-205.
- Feldstein M.S.** (1980), "International Differences in Social Security and Saving", *Journal of Public Economics*, 82 (5), pp.905-926.
- Feldstein M.S.** (1995), "College Scholarship Rules and Private Saving", *American Economic Review*, vol. 85 (3), pp. 552-566.
- Ferrera M.** (1998), *Le trappole del welfare*, Bologna, Il Mulino.
- Fiorito R., Kollintzas T.** (2004), "Public Goods, Merit Goods, and the Relation between Private and Government Consumption", *European Economic Review*, 48, pp. 1367-1398.
- Förster M., Pearson M.** (2002), "Income Distribution and Poverty in the OECD Area: Trends and Driving Forces", *OECD Economic Studies*, No. 34, pp. 7-39.

- Hubbard R.G., Skinner J.S., Zeldes S.P.** (1993), "The Importance of Precautionary Motives in Explaining Individual and Aggregate Saving", NBER Working Paper No. W4516.
- IMF** (2002), *World Economic Outlook*, April. Washington, D.C.
- ISAE** (2004), "Misure della propensione al consumo delle famiglie italiane", Nota Mensile, Febbraio.
- Jappelli T., Padula M., Bottazzi R.** (2004), "Retirement expectations, pension reform, and their impact on private accumulation", CSEF Working Paper n. 92.
- Jappelli T., Checchi D.** (2004), "Dov'è finito il popolo delle formiche", Lavoce.info, 15-11-2004 [www.lavoce.info].
- Karras G.** (1994), "Government Spending and Private Consumption: Some International Evidence", *Journal of Monet, Credit and Banking*, 26, pp.9-22.
- Levaggi R.** (1998), "The Effects of the Provision of Public Goods on Private Consumption in Italy: A Macroeconomic Perspective", *Rivista Internazionale di Scienze Economiche e Commerciali*, Vol. XLV, No.1, pp. 47-63.
- Kotikloff L.J.** (1988), "Intergenerational Transfers and Savings", *Journal of Economic Perspectives*, 2, pp. 41-58.
- Kotikloff L.J., Summers L.H.** (1981), "The Role of Intergenerational Transfers in Aggregate Capital formation", *Journal of Political Economy*, 89, pp. 706-732.
- Modigliani F.** (1990) "Recent Declines in the Saving rate: A life-cycle Perspective", Frisch Lecture, Sixth World Congress of the Econometric Society, Barcelona (August), mimeo.
- Modigliani F., Brumberg R.** (1954) "Utility Analysis and the Consumption Function: An Interpretation of the Cross-section Data", *Post-Keynesian Economics*, New Brunswick, NJ, Rutgers University Press.
- Modigliani F., Brumberg R.** (1979) "Utility Analysis and the Consumption Function: An Attempt at Integration", in A. Abel (ed.), *The Collected Papers of Franco Modigliani*, Vol. 2, Cambridge, MA, MIT Press, pp. 128-197.
- Muellbauer J.** (1994), "The Assessment: Consumer Expenditure", *Oxford Review of Economic Policy*, vol. 10, No. 2, pp. 1-41.
- Mead C.I, Moses K.E., Moulton B.R.** (2004), "The NIPAs and the System of National Accounts", *Survey of Current Business*, Vol. 84, No. 12, pp. 17-32.
- Ni S.** (1995), "An Empirical Analysis on the Substitutability between Private Consumption and Government Purchases", *Journal of Monetary Economics*, 36, pp. 593-605.
- OECD** (2004), *Economic Outlook*, No. 76. Paris.

- Paiella M.** (2004), “Does Wealth Affect Consumption? Evidence for Italy”, Banca d’Italia, Temi di discussione del Servizio Studi, No. 510.
- Simonazzi A.** (2003), “Innovation and Growth: Supply and Demand Factors in the Recent US Expansion”, *Cambridge Journal of Economics*, vol.27, no. 5, pp. 647-669.
- Simonazzi A., Vianello, F.** (2001), “Financial Liberalization, the European Single Currency and the Problem of Unemployment”, in R. Franzini and R.F. Pizzuti (eds.), *Globalization, Institutions and Social Cohesion*, Heidelberg, Springer Verlag.
- Sinn H.W.** (1998), “Social Insurance, Incentives and Risk-Taking”, in P.B. Sorensen (ed.), *Public Finance in a Changing World*, MacMillan Press Ltd.
- Tanzi V.** (2004), “Globalization, Social Protection and Public Finance”, SIEP, October, Dipartimento di Economia Pubblica e Territoriale, Università di Pavia.
- Zolli M.** (2004), “I sistemi di Welfare State nei paesi dell'Unione Europea”, LLEE Working Document, No. 1.

Appendices

A. Figures

Figure 1. Final consumption growth
Euro15 and Anglophone countries

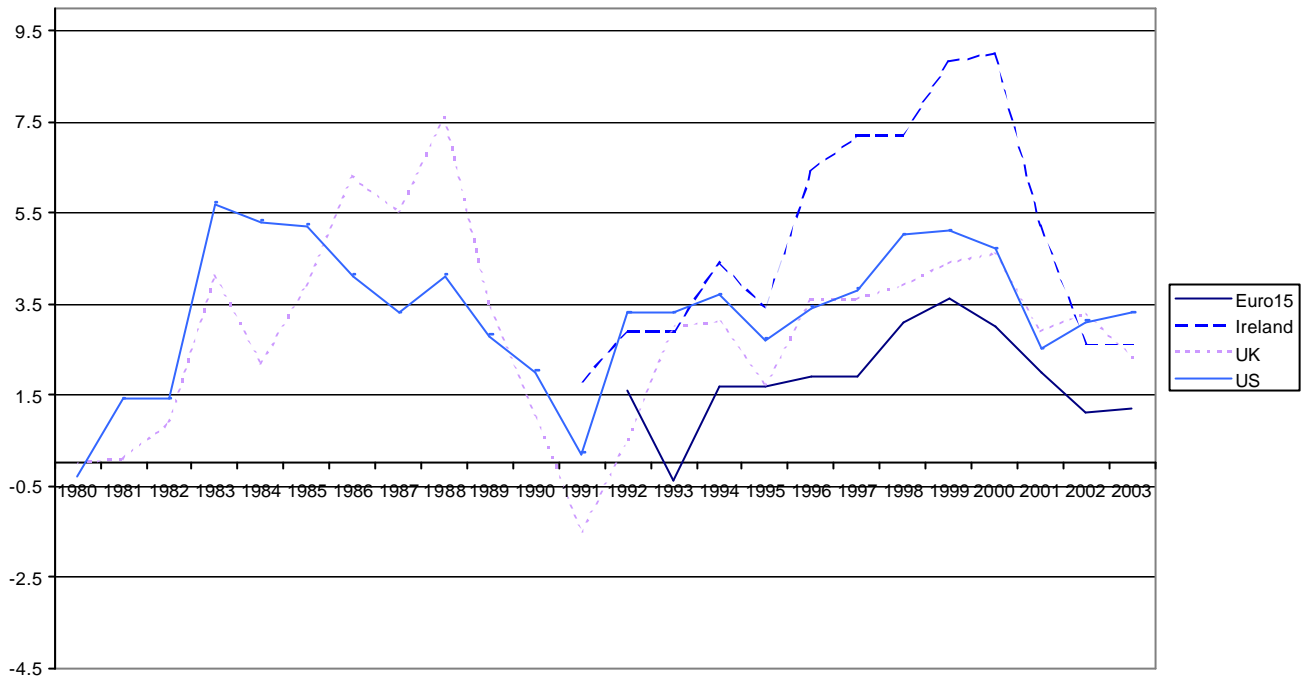


Figure 2. Final consumption growth
Continental countries

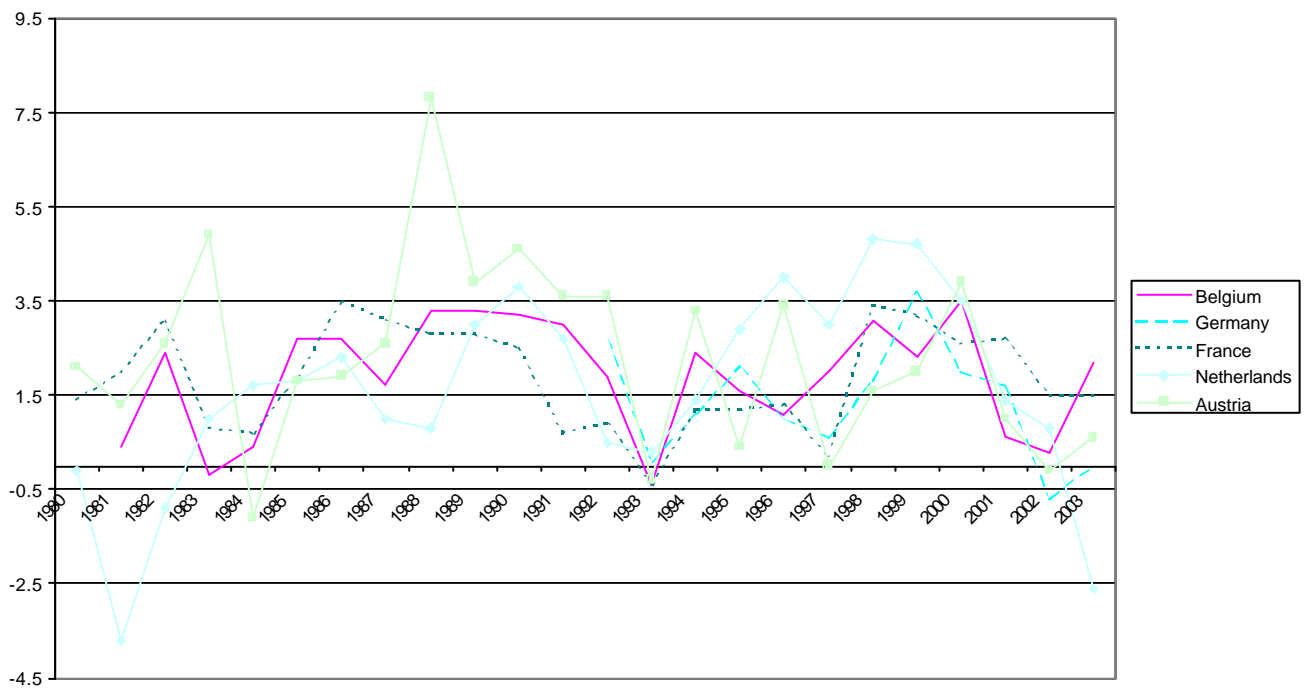


Figure 3. Final consumption growth
Mediterranean countries

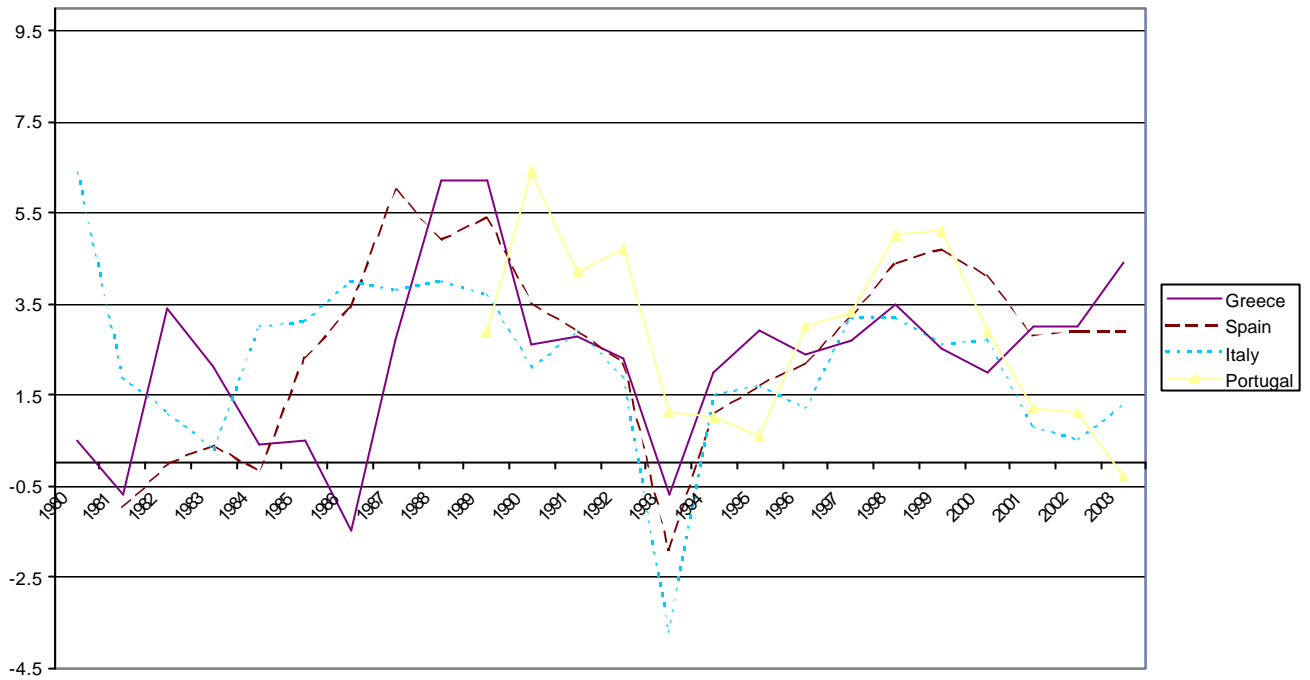


Figure 4. Final consumption growth
Scandinavia

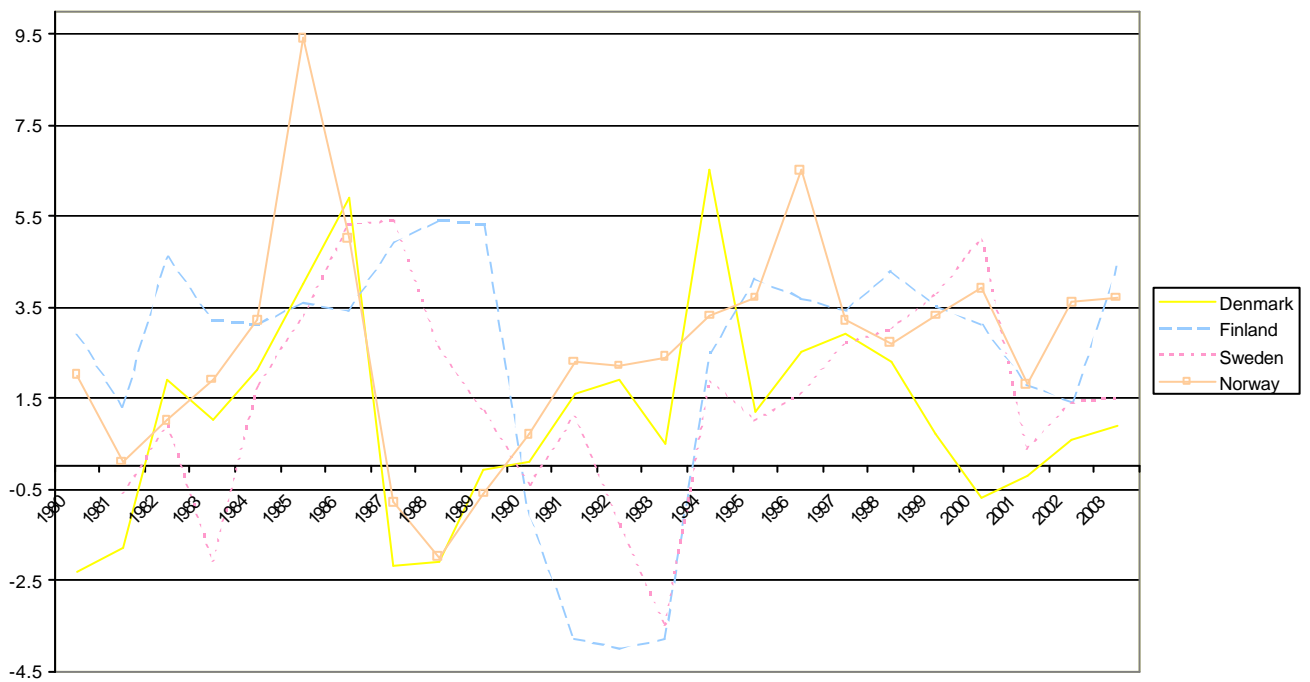


Figure 5. Average propensity to consume
UK and US

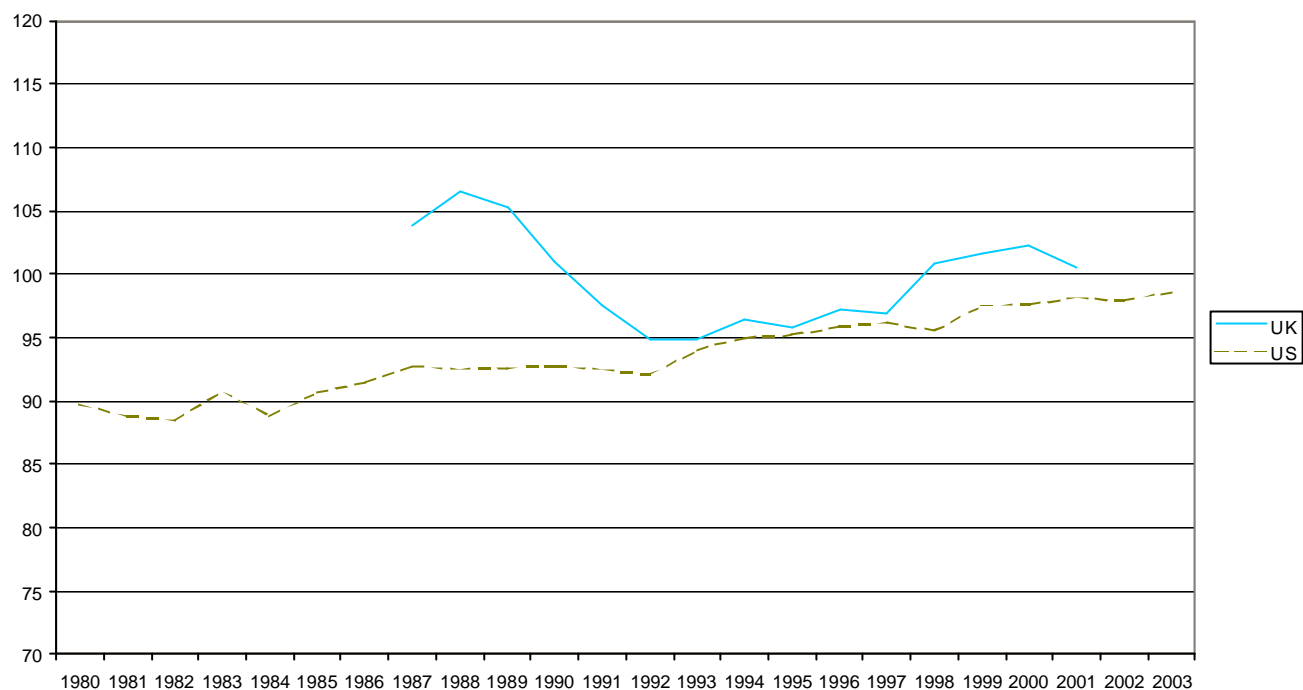


Figure 6. Average propensity to consume
Continental countries

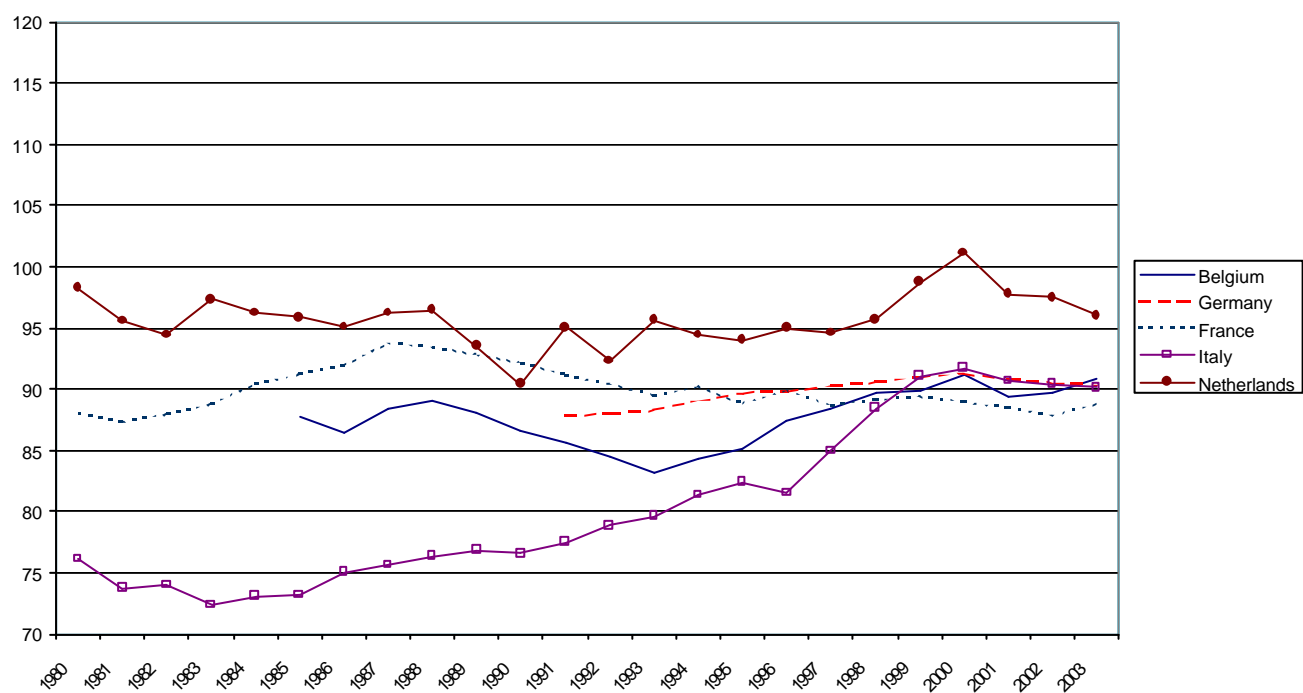


Figure 7. Average propensity to consume
Scandinavia

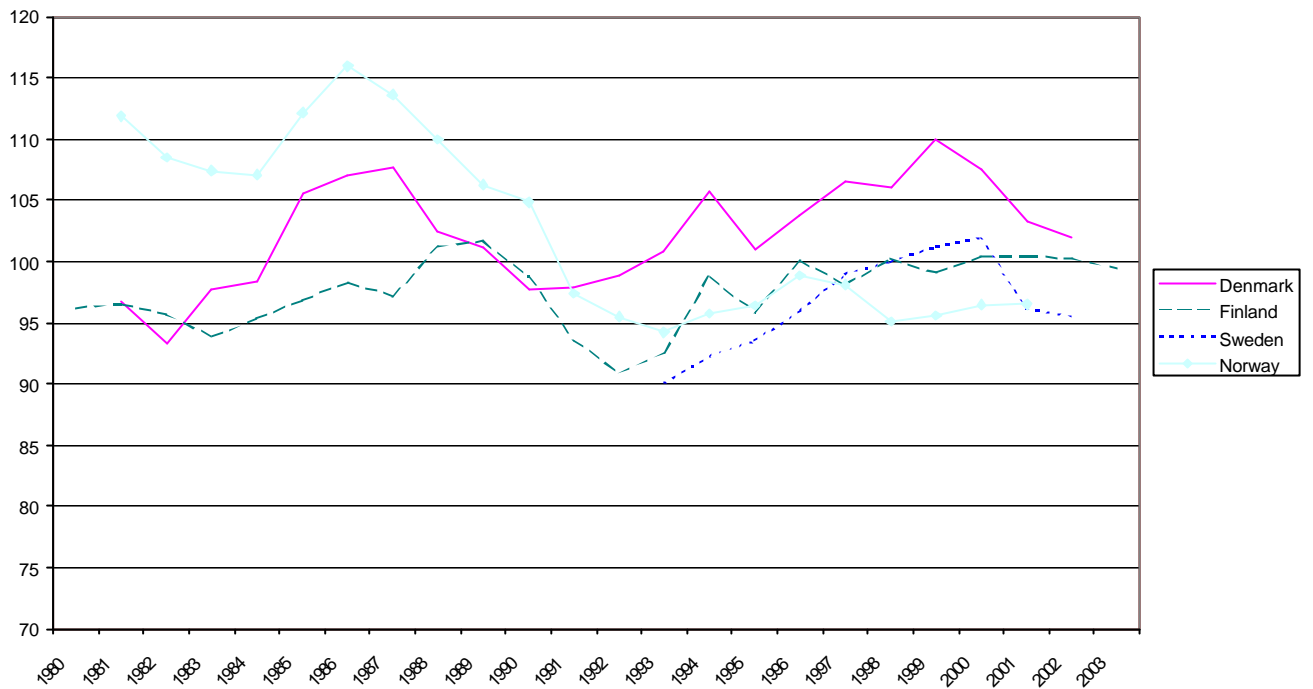


Figure 8. Net saving rates
panel [a]

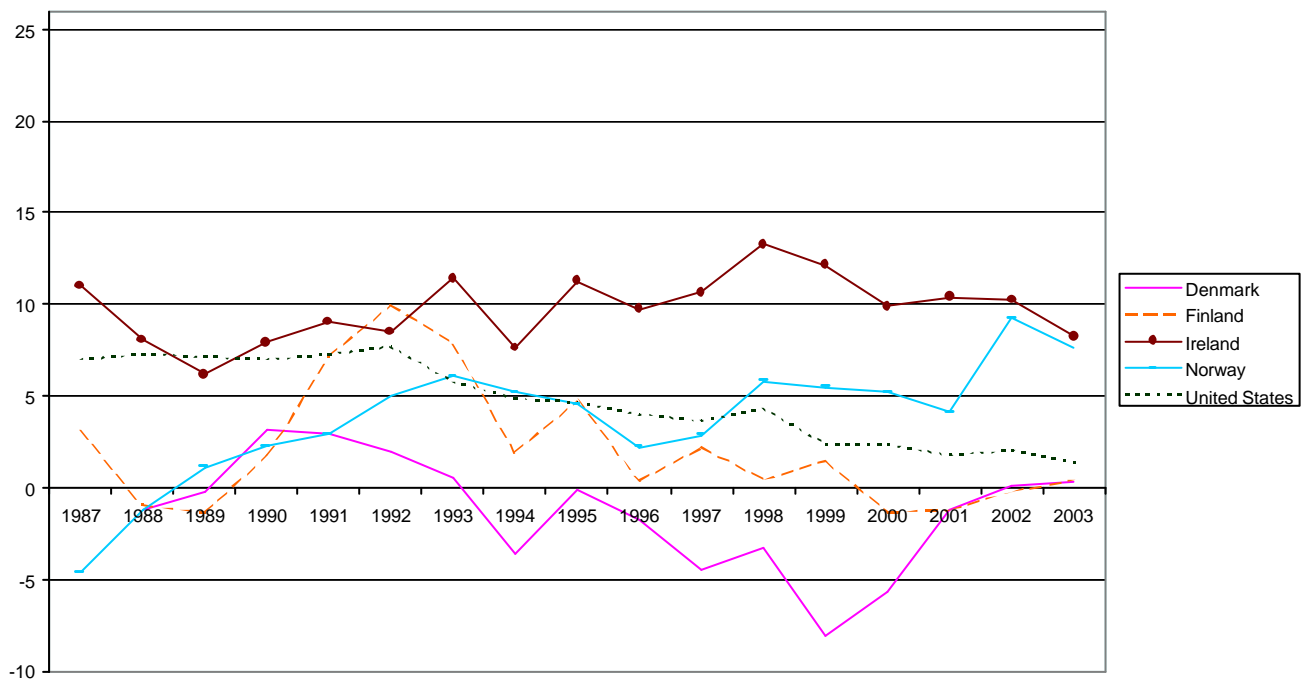
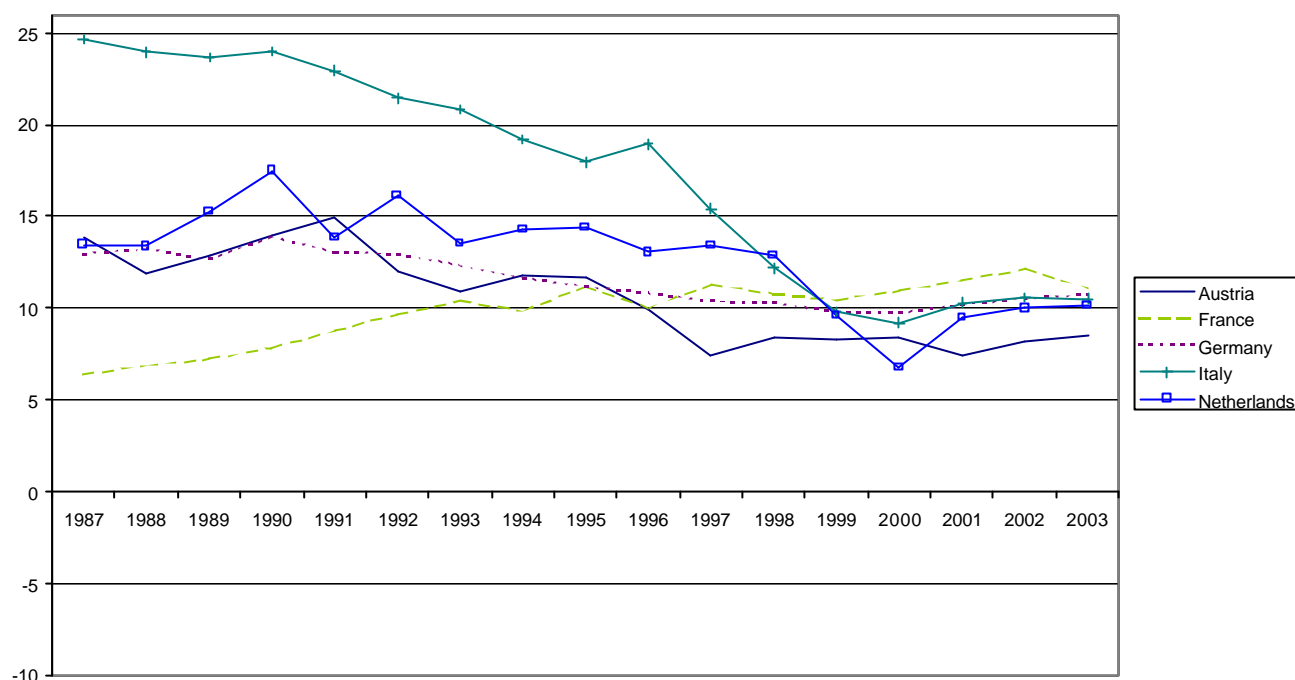


Figure 8. Net saving rates
panel [b]



B. Tables

Table 1. Average rates of growth of GDP and employment

| <i>GDP at 1995 market prices</i> | | | | | |
|----------------------------------|--------|---------|-------|---------|-----|
| | France | Germany | Italy | Euro 15 | US |
| 1961-70 | 5.6 | 4.4 | 5.7 | 4.9 | 4.2 |
| 1971-80 | 3.3 | 2.7 | 3.6 | 3.0 | 3.2 |
| 1981-90 | 2.5 | 2.2 | 2.2 | 2.4 | 3.2 |
| 1991-2000 | 1.8 | 1.9 | 1.5 | 2.0 | 3.4 |

| <i>Employment, persons: total economy</i> | | | | | |
|---|--------|---------|-------|---------|-----|
| | France | Germany | Italy | Euro 15 | US |
| 1961-70 | 0.6 | 0.2 | -0.5 | 0.3 | 2.0 |
| 1971-80 | 0.5 | 0.2 | 1.0 | 0.4 | 2.1 |
| 1981-90 | 0.3 | 0.5 | 0.7 | 0.5 | 1.8 |
| 1991-2000 | 0.5 | 0.3 | 0.2 | 0.5 | 1.5 |

Source: Simonazzi (2003)

Table 2. Correlation between GDP and final consumption growth - 1992-2003

| Belgium | Denmark | Germany | Greece | Spain | France | Ireland | Italy |
|---------|---------|---------|--------|-------|--------|---------|-------|
| 0.826 | 0.677 | 0.719 | 0.798 | 0.893 | 0.795 | 0.798 | 0.742 |

| Netherlands | Austria | Portugal | Finland | Sweden | UK | Norway | US |
|-------------|---------|----------|---------|--------|-------|--------|-------|
| 0.939 | 0.707 | 0.581 | 0.862 | 0.872 | 0.687 | 0.316 | 0.776 |

Own elaboration on Eurostat data

Table 3. Average propensity to consume out of disposable income

| | Denmark | | Germany | | France | | Italy | | Netherlands | |
|------|---------|-------|---------|------|--------|------|-------|------|-------------|-------|
| | [a] | [b] | [a] | [b] | [a] | [b] | [a] | [b] | [a] | [b] |
| 1980 | : | : | : | : | 88.0 | 89.9 | 76.1 | : | 98.3 | 98.6 |
| 1981 | 96.7 | : | : | : | 87.3 | 89.3 | 73.7 | : | 95.5 | 96.4 |
| 1982 | 93.3 | : | : | : | 88.0 | 90.0 | 74.0 | : | 94.4 | 95.5 |
| 1983 | 97.6 | : | : | : | 88.8 | 90.7 | 72.4 | : | 97.3 | 97.8 |
| 1984 | 98.4 | : | : | : | 90.4 | 92.1 | 73.1 | : | 96.2 | 96.9 |
| 1985 | 105.5 | : | : | : | 91.2 | 92.8 | 73.2 | : | 95.9 | 96.6 |
| 1986 | 107.0 | : | : | : | 91.9 | 93.4 | 75.0 | : | 95.1 | 96.0 |
| 1987 | 107.7 | : | : | : | 93.8 | 94.9 | 75.7 | : | 96.3 | 97.0 |
| 1988 | 102.4 | 101.8 | : | : | 93.4 | 94.6 | 76.3 | 79.5 | 96.5 | 97.2 |
| 1989 | 101.1 | 100.8 | : | : | 92.8 | 94.1 | 76.8 | 79.9 | 93.5 | 94.7 |
| 1990 | 97.8 | 98.3 | : | : | 92.1 | 93.5 | 76.6 | 79.9 | 90.4 | 92.1 |
| 1991 | 97.9 | 98.5 | 87.8 | 89.5 | 91.2 | 92.7 | 77.5 | 80.7 | 95.1 | 96.0 |
| 1992 | 98.9 | 99.2 | 88.0 | 89.7 | 90.4 | 92.1 | 78.8 | 81.8 | 92.3 | 93.8 |
| 1993 | 100.8 | 100.6 | 88.3 | 90.0 | 89.5 | 91.4 | 79.6 | 82.5 | 95.6 | 96.5 |
| 1994 | 105.7 | 104.2 | 89.0 | 90.7 | 90.2 | 92.0 | 81.4 | 83.9 | 94.4 | 95.5 |
| 1995 | 101.0 | 100.7 | 89.7 | 91.3 | 88.8 | 90.9 | 82.4 | 84.7 | 94.0 | 95.2 |
| 1996 | 103.7 | 102.7 | 89.8 | 91.4 | 89.9 | 91.8 | 81.5 | 83.9 | 95.0 | 95.9 |
| 1997 | 106.5 | 104.8 | 90.3 | 91.7 | 88.7 | 90.8 | 85.0 | 87.0 | 94.6 | 95.6 |
| 1998 | 106.1 | 104.4 | 90.5 | 92.0 | 89.2 | 91.2 | 88.4 | 90.0 | 95.7 | 96.5 |
| 1999 | 110.0 | 107.2 | 91.0 | 92.3 | 89.4 | 91.4 | 91.1 | 92.3 | 98.7 | 99.0 |
| 2000 | 107.4 | 105.3 | 91.2 | 92.5 | 88.9 | 91.0 | 91.7 | 92.9 | 101.1 | 100.9 |
| 2001 | 103.2 | 102.3 | 90.8 | 92.1 | 88.5 | 90.6 | 90.7 | 92.1 | 97.8 | 98.2 |
| 2002 | 102.0 | 101.4 | 90.5 | 91.9 | 87.8 | 90.1 | 90.4 | 91.9 | 97.5 | 98.0 |
| 2003 | : | : | 90.3 | 91.8 | 88.8 | 90.9 | 90.2 | 91.6 | 96.0 | : |

| | Finland | | Sweden | | UK | | Norway | | US | |
|------|---------|-------|--------|-------|-------|-------|--------|-------|------|-------|
| | [a] | [b] | [a] | [b] | [a] | [b] | [a] | [b] | [a] | [b] |
| 1980 | 96.2 | 96.8 | : | : | : | : | : | : | 89.7 | 90.6* |
| 1981 | 96.5 | 97.2 | : | : | : | : | 111.9 | 109.2 | 88.8 | 89.7* |
| 1982 | 95.7 | 96.4 | : | : | : | : | 108.5 | 106.6 | 88.5 | 89.4* |
| 1983 | 93.9 | 94.9 | : | : | : | : | 107.4 | 105.8 | 90.7 | 91.5* |
| 1984 | 95.3 | 96.2 | : | : | : | : | 107.1 | 105.5 | 88.8 | 89.7* |
| 1985 | 96.8 | 97.5 | : | : | : | : | 112.2 | 109.6 | 90.7 | 91.4* |
| 1986 | 98.3 | 98.7 | : | : | : | : | 116.0 | 112.5 | 91.5 | 92.2* |
| 1987 | 97.1 | 97.7 | : | : | 103.9 | 103.3 | 113.6 | 110.5 | 92.8 | 93.4* |
| 1988 | 101.2 | 100.9 | : | : | 106.6 | 105.5 | 110.0 | 107.8 | 92.5 | 93.1* |
| 1989 | 101.7 | 101.3 | : | : | 105.3 | 104.5 | 106.3 | 104.9 | 92.6 | 93.2* |
| 1990 | 98.7 | 99.0 | : | : | 101.1 | 100.9 | 104.9 | 103.8 | 92.8 | 93.4* |
| 1991 | 93.6 | 95.0 | : | : | 97.6 | 97.9 | 97.4 | 97.9 | 92.5 | 93.1* |
| 1992 | 90.8 | 92.8 | : | : | 94.9 | 95.7 | 95.5 | 96.4 | 92.0 | 92.7* |
| 1993 | 92.6 | 94.1 | 90.0 | 92.6 | 94.8 | 95.6 | 94.2 | 95.4 | 94.0 | 94.5* |
| 1994 | 98.8 | 99.0 | 92.3 | 94.3 | 96.5 | 97.0 | 95.7 | 96.6 | 95.0 | 95.4* |
| 1995 | 95.8 | 96.7 | 93.5 | 95.2 | 95.8 | 96.4 | 96.4 | 97.1 | 95.2 | 95.6 |
| 1996 | 100.1 | 100.1 | 96.0 | 97.1 | 97.3 | 97.7 | 98.9 | 99.1 | 95.8 | 96.2 |
| 1997 | 98.1 | 98.5 | 99.0 | 99.3 | 96.8 | 97.3 | 98.1 | 98.5 | 96.2 | 96.5 |
| 1998 | 100.3 | 100.2 | 100.0 | 100.0 | 100.9 | 100.8 | 95.1 | 96.1 | 95.5 | 95.9 |
| 1999 | 99.0 | 99.2 | 101.2 | 100.9 | 101.7 | 101.4 | 95.6 | 96.5 | 97.5 | 97.7 |
| 2000 | 100.4 | 100.3 | 101.9 | 101.4 | 102.2 | 101.9 | 96.4 | 97.2 | 97.6 | 97.8 |
| 2001 | 100.4 | 100.3 | 96.1 | 97.2 | 100.6 | 100.5 | 96.5 | 97.3 | 98.2 | 98.3 |
| 2002 | 100.2 | 100.2 | 95.5 | 96.8 | : | : | : | : | 97.9 | 98.1 |
| 2003 | 99.4 | 99.5 | : | : | : | : | : | : | 98.6 | 98.7 |

[a] = Household and NPISH final consumption (% of net disposable income) - [b] = Actual final consumption (% of adjusted net disposable income)

Note: (:) = missing data - (*) = estimated data

Own elaboration on Eurostat data - US household and NPISH net disposable income: Bureau of Economic Analysis - US actual individual consumption: OECD

Table 4. Net social expenditure indicator - percentage of GDP at factor cost - 1995

| | Denmark | Finland | Germany | Ireland | Italy |
|---|---------|---------|---------|---------|-------|
| Gross public social expenditure | 37.6 | 35.7 | 30.4 | 21.8 | 26.5 |
| Net current public social expenditure | 23.6 | 25.1 | 25.9 | 17.4 | 20.9 |
| Gross mandatory private social expenditure | 0.6 | 0.2 | 1.8 | : | : |
| Net direct mandatory private social expenditure | 0.3 | 0.0 | 1.0 | : | : |
| Net publicly mandated social expenditure | 23.9 | 25.1 | 26.9 | 17.4 | 20.9 |
| Gross voluntary private social expenditure | 1.0 | 1.2 | 1.0 | 2.0 | 1.9 |
| Net direct voluntary private social expenditure | 0.5 | 0.7 | 0.8 | 1.5 | 1.4 |
| Net direct private social expenditure | 0.8 | 0.8 | 1.8 | 1.5 | 1.4 |
| Net total socialexpenditure ^o | 24.4 | 25.7 | 27.7 | 18.7 | 22.3 |

| | Netherlands | Norway | Sweden | UK | US |
|---|-------------|--------|--------|------|------|
| Gross public social expenditure | 30.1 | 31.5 | 36.4 | 25.9 | 17.1 |
| Net current public social expenditure | 21.2 | 21.9 | 25.4 | 22.3 | 17.7 |
| Gross mandatory private social expenditure | 0.8 | 1.0 | 0.4 | 0.4 | 0.5 |
| Net direct mandatory private social expenditure | 0.5 | 0.6 | 0.2 | 0.3 | 0.5 |
| Net publicly mandated social expenditure | 21.7 | 22.5 | 25.6 | 22.6 | 18.2 |
| Gross voluntary private social expenditure | 4.9 | : | 2.3 | 4.8 | 8.6 |
| Net direct voluntary private social expenditure | 3.4 | : | 1.4 | 3.6 | 7.8 |
| Net direct private social expenditure | 3.8 | : | 1.6 | 3.9 | 8.3 |
| Net total socialexpenditure ^o | 25.0 | : | 27.0 | 26.0 | 24.5 |

Note: (:) = missing data

(^o): net total social expenditure is not simply the sum of net current public social expenditure and net direct private social expenditure, as some public expenditure items are tantamount to financing current private benefits, like private health provisions.

Estimates on net total social expenditure account for this potential double counting, see Adema (1999).

Source: Adema (1999)

Table 5. Final consumption (% of GDP)

| | Denmark | | Germany | | France | | Ireland | | Italy | | Netherlands | |
|------|---------|------|---------|------|--------|------|---------|------|-------|------|-------------|------|
| | [a] | [b] | [a] | [b] | [a] | [b] | [a] | [b] | [a] | [b] | [a] | [b] |
| 1980 | 53.7 | : | : | : | 55.8 | 67.9 | : | : | 58.2 | : | 52.8 | 65.1 |
| 1981 | 54.0 | : | : | : | 57.0 | 69.6 | : | : | 58.4 | : | 51.6 | 64.1 |
| 1982 | 53.0 | : | : | : | 57.2 | 70.3 | : | : | 58.6 | : | 51.7 | 64.3 |
| 1983 | 52.1 | : | : | : | 56.9 | 70.1 | : | : | 57.9 | : | 51.7 | 64.1 |
| 1984 | 51.9 | : | : | : | 56.7 | 70.2 | : | : | 58.2 | : | 51.3 | 63.2 |
| 1985 | 51.9 | : | : | : | 57.0 | 70.4 | : | : | 58.3 | : | 51.3 | 63.2 |
| 1986 | 52.3 | : | : | : | 56.3 | 69.5 | : | : | 58.3 | : | 50.9 | 62.9 |
| 1987 | 50.9 | : | : | : | 56.7 | 69.7 | : | : | 58.3 | : | 51.6 | 64.1 |
| 1988 | 50.2 | 67.5 | : | : | 55.6 | 68.3 | : | : | 57.8 | 69.5 | 50.4 | 62.6 |
| 1989 | 49.9 | 66.9 | : | : | 55.3 | 68.0 | : | : | 58.4 | 70.1 | 49.8 | 61.5 |
| 1990 | 49.1 | 65.8 | : | : | 55.3 | 68.2 | 59.1 | 68.9 | 57.5 | 69.8 | 49.6 | 61.2 |
| 1991 | 49.3 | 66.3 | 56.8 | 67.3 | 55.5 | 68.4 | 59.5 | 69.9 | 58.1 | 70.5 | 49.9 | 61.8 |
| 1992 | 49.5 | 66.8 | 56.7 | 67.7 | 55.5 | 68.7 | 59.4 | 70.1 | 59.3 | 71.6 | 49.9 | 62.3 |
| 1993 | 50.0 | 68.1 | 57.5 | 68.5 | 55.8 | 69.9 | 57.8 | 68.7 | 58.5 | 70.4 | 49.8 | 62.5 |
| 1994 | 51.1 | 68.4 | 56.8 | 68.0 | 55.6 | 69.7 | 57.6 | 68.5 | 58.9 | 70.3 | 49.4 | 62.0 |
| 1995 | 50.5 | 67.7 | 56.9 | 68.3 | 55.5 | 69.6 | 54.2 | 64.2 | 58.7 | 69.3 | 49.0 | 61.5 |
| 1996 | 50.3 | 67.7 | 57.4 | 68.9 | 55.8 | 70.1 | 53.7 | 63.2 | 58.3 | 69.1 | 49.9 | 61.7 |
| 1997 | 50.2 | 67.4 | 57.7 | 69.0 | 55.0 | 69.1 | 51.1 | 60.3 | 58.9 | 69.9 | 49.4 | 61.4 |
| 1998 | 50.3 | 67.7 | 57.6 | 68.8 | 54.8 | 68.9 | 49.0 | 57.5 | 59.4 | 70.2 | 49.7 | 61.6 |
| 1999 | 49.6 | 67.3 | 58.4 | 69.5 | 54.8 | 68.7 | 47.6 | 56.2 | 60.3 | 71.2 | 50.1 | 62.2 |
| 2000 | 47.7 | 65.2 | 59.0 | 70.0 | 54.4 | 68.4 | 46.7 | 55.4 | 60.5 | 71.8 | 49.9 | 61.9 |
| 2001 | 47.1 | 65.4 | 59.7 | 70.8 | 54.7 | 68.7 | 45.7 | 55.2 | 60.0 | 71.7 | 49.6 | 62.0 |
| 2002 | 47.2 | 65.9 | 58.9 | 70.2 | 54.7 | 69.2 | 44.7 | 54.5 | 60.1 | 71.9 | 49.8 | 62.9 |
| 2003 | 47.2 | 66.2 | 59.0 | 70.3 | 55.5 | 70.3 | 45.2 | 55.4 | 60.4 | 72.4 | 48.4 | : |

| | Austria | | Portugal | | Finland | | UK | | Norway | | US | |
|------|---------|------|----------|------|---------|------|------|------|--------|------|------|-------|
| | [a] | [b] | [a] | [b] | [a] | [b] | [a] | [b] | [a] | [b] | [a] | [b] |
| 1980 | 54.4 | 65.2 | : | : | 52.5 | 63.9 | 58.9 | 70.0 | 46.7 | 58.4 | 63.0 | 69.8* |
| 1981 | 55.3 | 66.6 | : | : | 52.4 | 64.2 | 59.6 | 71.2 | 46.3 | 58.0 | 62.0 | 68.6* |
| 1982 | 55.8 | 67.2 | : | : | 53.5 | 65.3 | 59.6 | 71.1 | 47.0 | 59.0 | 63.8 | 70.6* |
| 1983 | 57.3 | 68.5 | : | : | 53.3 | 65.4 | 59.9 | 71.5 | 46.8 | 58.9 | 64.8 | 71.5* |
| 1984 | 56.7 | 67.9 | : | : | 52.5 | 64.9 | 60.0 | 71.3 | 45.6 | 57.3 | 63.6 | 70.2* |
| 1985 | 56.6 | 68.0 | : | : | 52.8 | 65.9 | 59.9 | 70.7 | 47.7 | 59.3 | 64.5 | 71.1* |
| 1986 | 55.8 | 67.4 | : | : | 52.9 | 66.4 | 61.8 | 72.8 | 52.1 | 64.5 | 65.0 | 71.8* |
| 1987 | 55.8 | 67.6 | : | : | 52.7 | 66.4 | 61.7 | 72.9 | 51.0 | 64.1 | 65.4 | 72.3* |
| 1988 | 56.7 | 67.8 | 62.7 | 71.2 | 51.3 | 64.5 | 62.5 | 73.5 | 50.5 | 63.8 | 65.7 | 72.5* |
| 1989 | 56.7 | 67.7 | 61.9 | 70.6 | 50.7 | 63.9 | 62.5 | 73.3 | 49.4 | 62.5 | 65.6 | 72.3* |
| 1990 | 56.9 | 67.8 | 62.5 | 71.7 | 50.1 | 64.2 | 62.6 | 73.5 | 49.1 | 62.2 | 66.2 | 73.1* |
| 1991 | 56.7 | 67.8 | 63.4 | 73.4 | 53.5 | 69.4 | 63.3 | 74.8 | 49.2 | 62.0 | 66.5 | 73.5* |
| 1992 | 57.5 | 68.9 | 64.4 | 74.6 | 54.5 | 70.6 | 64.0 | 76.0 | 50.2 | 63.5 | 66.8 | 73.7* |
| 1993 | 57.5 | 69.5 | 66.1 | 77.1 | 54.1 | 69.2 | 64.8 | 76.4 | 50.1 | 63.4 | 67.3 | 74.1* |
| 1994 | 57.8 | 69.9 | 65.1 | 75.8 | 52.9 | 67.4 | 64.3 | 75.7 | 49.8 | 62.9 | 67.1 | 73.8* |
| 1995 | 57.1 | 69.1 | 63.3 | 74.3 | 51.2 | 65.5 | 64.0 | 75.2 | 49.3 | 62.2 | 67.3 | 73.9 |
| 1996 | 58.1 | 69.9 | 63.4 | 75.1 | 52.1 | 66.7 | 64.6 | 75.7 | 48.6 | 61.2 | 67.2 | 73.8 |
| 1997 | 57.9 | 69.1 | 62.5 | 73.8 | 50.6 | 64.4 | 64.6 | 75.3 | 47.4 | 59.9 | 66.8 | 73.1 |
| 1998 | 56.8 | 68.1 | 62.2 | 73.5 | 49.5 | 63.0 | 65.0 | 75.6 | 49.0 | 62.5 | 67.2 | 73.5 |
| 1999 | 56.1 | 67.4 | 62.4 | 74.2 | 50.3 | 63.9 | 65.6 | 76.6 | 47.4 | 60.6 | 67.8 | 74.1 |
| 2000 | 56.8 | 67.9 | 62.0 | 74.1 | 49.5 | 62.7 | 65.9 | 77.1 | 42.6 | 54.5 | 68.7 | 75.0 |
| 2001 | 57.0 | 67.8 | 61.4 | 73.9 | 50.1 | 63.7 | 66.4 | 77.9 | 42.7 | 55.8 | 69.7 | 76.2 |
| 2002 | 56.2 | 67.1 | 61.3 | 73.9 | 50.9 | 64.9 | 66.3 | 78.5 | 44.7 | 57.7 | 70.3 | 77.1 |
| 2003 | 56.1 | 67.0 | 62.3 | : | 52.3 | 66.8 | 65.5 | 78.4 | 46.2 | 59.7 | 70.5 | 77.4 |

Note: [a] = Household and NPISH final consumption expenditure; [b] = Actual individual consumption

(:) = missing data - (*) = estimated data

Own elaboration on Eurostat data - US actual individual consumption, US GDP: OECD