FINANCING SOCIAL PROTECTION: THE EMPLOYMENT EFFECT

FURTHER MATERIAL

This document contains annexes and additional information to Chapter 4, "Financing Social Protection: the Employment Effect", of the 2007 edition of the ***OECD Employment Outlook***. The complete versions of the Employment Outlook are available online, on free access, one year after their publication on *www.oecd.org/els/employmentoutlook*.

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ANNEX 4.A1

SOCIAL EXPENDITURES AND THEIR FINANCING: SOURCES AND DATA ISSUES

Cross-country data on the financing of social protection properly distinguishing between public and private sector schemes is not available. This reflects the fact that national social security accounts do not exist in all countries. As explained in the 1993 System of National Accounts, some countries do not distinguish social security funds as a separate sub-sector on a par with central, state and local government. It makes sense when the management of social security funds is so closely integrated with the short- or medium-term requirements of the government's general economic policy that a clear distinction between the management of social security and the other economic functions of government cannot be drawn. Alternatively, in some countries, social security funds may exist only in a very rudimentary form. In either cases, social security funds are thus grouped with the corresponding government units at each level of government.

The data used was thus constructed based on the available information on *i)* social contributions and other taxes earmarked for social security and *ii)* social spending; the difference between social spending and taxes earmarked for social security is financed out of general taxation. This annex describes and discusses the sources used as well other sources that were not used.

1. Sources used

OECD SOCX data provide "public social expenditure" based on the definition of the public sector according to national accounts, that is the benefits for which the general government (central, state and local, and social security funds) controls the relevant financial flows. SOCX also provide "mandatory private social expenditure", that is social expenditure mandated by the state on employers or individuals (Adema and Ladaique, 2005). Some statistics are also available on voluntary private expenditures, but not of comprehensive coverage. Two main criteria have to be simultaneously satisfied for an expenditure to be classified as social: i) the benefits have to be intended to address one or more social purposes; ii) programmes regulating the provision of benefits have to involve either a) inter-personal redistribution or b) compulsory participation. For example, benefits accruing from insurance plans bought at market prices given individual preferences are not considered as social expenditure.

OECD Tax Revenue Statistics provide social contributions (serie 2000), which correspond to compulsory payments that confer an entitlement to receive a (contingent) future social benefit. Levies on income (1100) or payroll (3000) that are earmarked for social security funds but do not confer an entitlement to benefit are excluded from this heading. These and other possible taxes earmarked for social security should be included under the title "other taxes" in the "memorandum item on the financing of social security benefits". In practice, however, due to the difficulty to distinguish between social security and the rest of government in some countries, some existing earmarked taxes might not be reported under these headings. Finally, OECD Tax Revenue statistics also provide the overall taxation structure which permits to calculate the tax ratios (income and consumption taxes, see Annex 4.A2).

2. Sources not used

For the EC Member countries, Eurostat produces statistics on Social protection expenditures and receipts, the *European System of Integrated Social Protection Statistics* (ESSPROS). Social protection in ESSPROS encompasses all interventions from public and private bodies intended to relieve households or individuals of the burden of a defined set of risks or needs. ESSPROS data include all private social expenditure covered by "organised financing" with some collective dimension (contractual schemes for employees, non-contractual schemes for employees – *i.e.* provided at the discretion of the employer, other schemes organised for the general public or by specific groups such as the self-employed), but not spending covered by individual financing. A split between the public and the private part is not readily available, which prevented using this data in the chapter.

In principle, *national accounts* provide data for the social security funds, a part of the general government sector. However, while all social security funds should be included in this sub-sector, this is not the case in practice since, as already indicated above, social security funds cannot always be treated as a separate sub-sector on a par with central, state and local government.

References

Adema, W. and M. Ladaique (2005), "Net Social Expenditure, 2005 Edition – More comprehensive measures of social support", *OECD Social, Employment and Migration Working Papers No. 29.*

OECD (2006), *Revenue Statistics* 1965-2005 – 2006 Edition, Paris.

ANNEX 4.A2

TAX WEDGE AND *EX ANTE* BUDGET NEUTRAL REFORMS: DATA AND EXPLANATIONS

1. Implicit average effective tax rates on labour income

The calculation of implicit average effective tax rates on labour income follows and somewhat extends the approach developed in Carey and Rabesona (2002), itself based on the pioneering work by Mendoza *et al*. (1994). It simply consists in dividing tax receipts collected in a given area by the corresponding tax base (see Table 4.A2.1).

An alternative approach is to derive average effective tax rates through applying the statutory tax rules for each country to a representative taxpayer (*e.g*. tax wedge measures reported in the OECD's *Taxing Wages* publication). As noted by Heady (2004), the strength of this second approach lies in its ability to make international comparisons of tax systems without being affected by different population structures, by contrast to the implicit rate approach. On the other hand, the statutory rate approach is based on calculations for a small number of "typical" economic agents, and the extent to which these typical cases are effectively representative of the population of actual taxpayers may differ across country. By contrast, the implicit rate approach is based on realised tax revenues and tax bases and thus captures the *overall* effects of deductions, credits and taxpayer behaviour. Based on national accounts and tax revenues statistics, the implicit average effective tax rate on consumption can also be calculated and consistently added to the implicit average effective tax rate on labour.

The Mendoza approach assumes that wage income and income from capital are taxed similarly under personal income tax. This is a strong assumption, in particular for those countries relying on dual income tax or semi-dual income tax systems, which now represent more than half of OECD countries. The European Commission has calculated implicit tax rates on labour and capital, using a split of the personal income tax revenues according to economic functions (capital, employed labour, self-employed labour, social transfers and pensions) made available to them by EC Member States. These indicators thus offer a more accurate picture of personal income taxes levied on wages than those obtained from the Mendoza approach. They could not be used in the chapter for two reasons, however. First, they are limited to 9 EU countries over the 1995-2004 period. And second, for the purpose of this chapter, in particular the calculations done on the change in the tax rates and tax wedges implied by an *ex-ante* revenue neutral switch from social contributions to income or consumption taxes, the underlying data on the tax bases and tax rates were needed, not just the implicit tax rates.

Table 4.A2.1 **Implicit average effective tax rates on consumption expenditure and labour income**

Implicit average effective tax rate on consumption expenditure	
Tax components (Statistics Revenue)	All consumption taxes, denoted by T_C^{TGS} , belong to the broad category 5000 of the OECD system of tax classification, "Taxes on goods and services".[a]
Tax base components (National Accounts)	Household consumption: CP = private final consumption expenditure, including taxes; Government consumption: CG – CGW, where CG = Government final consumption expenditure, including taxes, and CGW = Government final wage consumption expenditure.
Hypothesis	The average tax ratio paid by households and government is the same.
Tax ratio on consumption, τ_C (% of before taxes consumption expenditure)	$\tau_C = T_C^{TGS} / TB_C$ T_C^{TGS} = 5110 + 5121 + 5122 + 5123 + 5126 + 5128 + 5200 – 5212. $TB_C = C^H + C^G$ is the overall tax base for consumption taxes,[b] $C^H = CP - \alpha T_C^{TGS}$ and $C^G = CG - CGW - (1 - \alpha) T_C^{TGS}$, resp. denotes household and government gross consumption expenditures, $\alpha = CP / (CG - CGW)$ is the share of households consumption in total consumption expenditure.
Implicit average effective tax rate on labour income	
Tax components (Statistics Revenue)	T_L^{ITH}: income taxes paid by households, item 1100 of the OECD system of tax classification, "Taxes on incomes, profits and capital gains of individuals or households";[c] T_L^{SSCH}: social security contributions paid by employees, items 2100 and 2400, resp. "Social security contributions paid by employees" and "Unallocated social security contributions"; T_L^F: social security contributions and payroll taxes paid by employers, items 2200 and 3000, resp. "Social security contributions paid by employers" and "Taxes on payroll and workforce".
Tax base components (National Accounts and OECD database on Social expenditures)	Household income: W, gross wages and salaries of dependent employment; OSPUE, unincorporated business net income (including imputed rentals on owner-occupied housing); PEI, interest, dividends and investment receipts; and BEN, benefits in cash for old age, incapacity and unemployment (from SOCX).
Hypothesis	The average personal income tax ratio paid by households on labour and capital incomes is the same.[d]
Direct tax ratio on labour income, τ_L	
(% of labour costs)	$\tau_L = (T_L^{ITH}+T_L^{SSCH}+T_L^F)/TB_L$ $TB_L = W+T_L^F$ is the overall tax base for taxes on labour income. $T_L^{SSCH} = 2100+\beta\ 2400$, where β is the share of labour income in household income, excluding benefits. T_L^F = 2200+3000 If social security contributions are not deductible from the income tax base:[e] $T_L^{ITH} = \tau_H W$, τ_H = 1100/(W+OSPUE+PEI+BEN) is the income tax ratio for total household income, β = W/(W+OSPUE+PEI). If social security contributions are deductible from the income tax base: $T_L^{ITH} = \tau_H (W-2100 -\beta\ 2400)$ τ_H = 1100/(W+OSPUE+PEI+BEN-2100-2300-2400) β = (W-2100)/(W+OSPUE+PEI-2100-2400)
Total tax ratio on labour income (including consumption taxes)	
τ_{LC} (% of labour costs)	$\tau_{LC} = \tau_L+(1-\tau_L)\ c\ \tau_C$ where **c** is the propensity to consume net wage, $c = \chi\ C^H / (W-T_L^{ITH}-T_L^{SSCH})$ and χ is the share of labour income in total household income, χ = W/(W+OSPUE+PEI+BEN).
τ'_{LC} (% of gross wages)	$\tau'_{LC} = \tau'_L+C^H/(W+OSPUE+PEI+BEN)\ \tau_C$ where τ'_L is the direct tax ratio on labour income in % of gross wages, $\tau'_L = (T_L^{ITH}+T_L^{SSCH}+T_L^F)/W$.

Table 4.A2.1 **Implicit average effective tax rates on consumption expenditure and labour income** (*cont'd*)

Notes:

a) T_C^{TGS} includes all 5000 items paid by households and government, i.e. more precisely: 5110, "General taxes on goods and services"; "Taxes on specific goods and services" (5121, excise taxes; 5122 profits of fiscal monopolies; 5123, customs and import duties; 5126, taxes on specific services; 5128, other taxes); and 5200, "Taxes on use of goods and perform activities" (excluding 5212, taxes on motor vehicles paid by other than households).

b) TB_C is considerably wider than the tax base actually subject to indirect taxation as it includes government non-wage consumption expenditure and many goods and services (*e.g.* basic food in some countries, financial services, medical services) in final private consumption expenditure, which are generally not subject to indirect taxes. This wider tax base is retained on the grounds that indirect tax (notably VAT) is generally paid on inputs to produce such goods and services. Hence, contrary to the assumption made to calculate the other tax ratios, it is implicitly assumed that the tax burden on the inputs for such goods and services is passed on to higher output prices.

c) In Japan, Germany, and Austria, business taxes, which are levied on unincorporated enterprises, must be removed from household taxes and allocated directly to capital.

Taxes on income, profits and capital gains that had not been allocated to households or companies (1300) have been reallocated as follows: Austria, tax on interest is added to 1100; Greece, this category (*impôts extraordinaires*) is allocated to households (1100) and companies (1200) according to their respective relative weights of each in taxes on income, profits and capital gains (1000); Hungary, withholding taxes on dividends and interest are added to 1100; New Zealand, taxes on interest and dividends are added to 1100 while the remainder of 1300 is added to 1200; Portugal, professional tax (*impôt professionnel*), supplementary personal tax (*impôt complémentaire personnes singulières et collectives*), and capital gains tax (*impôt sur plus-values*) are allocated to 1100.

d) This assumption does not reflect the reality as many OECD countries treat capital income differently from labour income. It is however necessary to calculate the tax ratios as the *OECD Revenue Statistics* do not distinguish in the category 1000 between taxes paid on labour and capital income. As capital income is generally taxed at lower rates than labour income, tax ratios on labour income tend to be understated.

e) Countries in which employees' social security contributions are not deductible: Australia, Canada, Hungary, Mexico, Portugal, the United Kingdom and the United States. (In Germany, Ireland, Poland and Turkey deductions are for a flat amount.)

The calculations made in the Chapter differ from those made by Carey and Rabesona (2002) in two points: *i)* benefits that are submitted to personal incomes taxes (namely unemployment, pension and disability benefits) are included in the corresponding tax base while they are not in CB; and *ii)* the overall tax ratio on labour includes consumption taxes by taking into account the propensity to consume wage incomes, while CB assume that households consume their entire wage income.

For simplicity, the propensity to consume wage income is held constant over time and equal to its average over the whole period in each country. Thus, changes in total tax wedge over time are entirely related to changes in the various tax ratios and do not reflect changes in propensity to consumption. On average, including indirect taxes on labour income in the tax wedge increases the latter by 9 percentage points (Table 4.A2.2). Finally, as regards direct taxes on wage income, average tax rates derived from the implicit rate approach are strongly correlated to those derived from the statutory rate approach.

Table 4.A1.2 **Implicit average effective tax rates**

Average over the period 1980-2003 and correlation coefficients with average statutory tax rates

	Employer social security contributions	Employee social security contributions	Income tax	Tax wedge (excluding consumption)	Consumption tax	Propensity to consume wage income		Total tax wedge including consumption
	% of gross wage			% labour cost	% gross consumption expenditures	Average	Standard deviation	% labour cost
Australia	3.2	0.0	16.9	19.5	11.2	0.83	0.03	27.0
Austria	21.8	13.5	12.1	38.9	19.1	0.84	0.02	48.7
Belgium	21.6	11.1	17.6	41.3	17.1	0.82	0.03	49.6
Canada	7.1	3.7	17.2	26.2	15.0	0.80	0.06	35.0
Czech Republic	30.8	10.9	7.0	37.2	17.3	0.80	0.02	45.9
Denmark	0.9	2.0	33.1	35.8	26.3	0.78	0.03	49.0
Finland	20.3	4.5	21.0	37.9	23.1	0.79	0.04	49.2
France	32.3	12.9	7.6	39.9	17.7	0.83	0.02	48.7
Germany	15.9	13.8	10.9	35.0	14.7	0.81	0.04	42.7
Hungary	30.9	6.8	11.1	37.3	23.4	0.76	0.01	48.5
Ireland	7.7	3.6	14.3	23.7	21.1	0.73	0.02	35.5
Italy	28.3	7.8	11.3	36.9	14.8	0.74	0.05	43.8
Japan	9.1	7.3	9.1	23.5	6.9	0.89	0.03	28.2
Korea	2.5	1.9	4.1	8.2	15.5	0.67	0.06	17.8
Netherlands	12.1	19.8	10.2	37.5	16.9	0.79	0.02	45.8
New Zealand	0.0	0.0	21.7	21.7	18.4	0.80	0.03	33.3
Norway	15.8	7.7	16.4	34.5	26.0	0.72	0.02	46.7
Poland	2.4	0.0	8.5	10.5	16.7	0.71	0.02	21.1
Portugal	16.7	8.0	7.9	28.0	18.1	0.88	0.02	39.5
Slovak Republic	30.5	9.8	5.5	35.1	17.6	0.83	0.03	44.6
Spain	16.5	4.0	7.1	23.8	12.9	0.65	0.03	30.1
Sweden	33.2	2.6	25.1	45.7	20.5	0.78	0.04	54.3
Switzerland	6.2	7.1	12.2	24.1	8.8	0.85	0.09	29.7
United Kingdom	7.6	5.5	11.6	23.0	16.0	0.73	0.03	31.9
United States	7.2	6.0	12.8	24.3	6.5	0.96	0.03	29.1
OECD (unweighted average)	**15.2**	**6.8**	**13.3**	**30.0**	**16.9**	**0.79**	**0.03**	**39.0**
Correlation with taxing wages data	0.86	0.89	0.88	0.80				
Number of obs.	495	497	497	495				

a) 1993-2003 for the Czech Republic, 1999-2003 for Hungary, 1991-2003 for Poland, 1995-2003 for Portugal, and 1998-2003 for the Slovak Republic.

Sources: Authors calculations based on OECD National accounts, OECD Social expenditure database and OECD Revenue Statistics.

2. *Ex ante* budget neutral reforms

The fact that these tax ratios are based on realised tax revenues and actual tax bases makes it possible to illustrate the impact on the tax wedge level of various tax reforms, so-called *ex ante* budgetary neutral in that the decrease in tax revenues resulting from a cut in a given tax rate t_i, is entirely compensated by a rise in another tax rate $\boldsymbol{\tau}_j$ while holding (*ex ante*) constant the corresponding tax bases (concretely, this means that gross consumption expenditures, gross wage and the other component of household income are held constant). Any tax ratio being calculated as $\boldsymbol{\tau}_i = T_i / TB_i$, where T_i denotes the total tax revenues and TB_i the corresponding tax base, this implies, for a given tax cut Δt_i: $\Delta t_j = \Delta t_i \, TB_i / TB_j$.

The overall change in the total tax wedge (in % of gross wage), $\boldsymbol{\tau'}_{LC}$, can then be simply derived (referring to the notations used in Table 4.A2.1):

$$\Delta\boldsymbol{\tau'}_{LC} = \Delta\boldsymbol{\tau'}_{L} + C^{H} / (W + OSPUE + PEI + BEN) + \Delta\boldsymbol{\tau}_{C},$$

where $\Delta\tau_C$ is the change in the tax rate on consumption (in % of gross consumption expenditure) and $\Delta\tau'_L$, the change in direct tax wedge (in % of gross wage). The latter directly results from changes in the rate of employers' or employees' social security contributions (in % of gross wage) and/or in the personal income tax rate (in % of household income).

Table 4.A2.3. **Income or consumption tax rates resulting from an *ex-ante* budget neutral cut in social security contributions by 5 percentage points**

	Social security contributions (SSC) and payroll taxes before shift (% gross wage)		Income tax (% household income)			Consumption tax (% gross consumption expenditures)	
				After shift			After shift
	Employees	Employers	Before shift	Cut in employee SSC	Cut in employer SSC	Before shift	(cut in employeee or employer SSC)
Australia	0.0	2.9	17.9	..	..	12.2	..
Austria	14.8	23.5	15.9	18.4	19.0	18.3	21.4
Belgium	11.8	22.6	20.4	22.6	23.2	16.7	19.7
Canada	4.9	8.3	16.7	..	19.9	13.7	17.2
Czech Republic	11.1	31.6	8.4	10.9	11.3	16.4	18.9
Denmark	2.3	0.5	36.6	..	..	27.2	..
Finland	5.4	22.8	22.1	24.5	25.2	23.1	26.3
France	10.7	31.9	11.6	14.1	14.5	16.6	19.5
Germany	15.0	16.8	11.3	13.8	14.2	14.6	17.6
Hungary	6.6	28.5	10.6	13.3	13.3	22.5	25.2
Ireland	3.7	7.9	14.0	..	17.3	21.0	24.5
Italy	7.9	29.8	14.1	15.8	16.1	15.0	17.2
Japan	9.6	10.1	7.3	10.5	10.9	7.6	10.9
Korea	7.4	5.2	4.9	7.7	7.9	15.6	18.9
Netherlands	15.6	10.4	10.9	13.9	14.4	18.1	21.4
Norway	8.9	15.8	17.7	20.2	20.8	24.7	28.2
Poland	15.4	19.3	5.9	8.1	8.3	16.3	18.6
Portugal	8.1	18.7	7.9	10.8	10.8	18.3	21.2
Slovak Republic	9.4	28.6	5.5	7.9	8.1	16.3	18.6
Spain	4.0	17.9	7.9	..	10.8	15.1	18.8
Sweden	6.9	33.7	24.2	26.5	27.4	21.5	24.9
Switzerland	6.9	6.7	12.1	14.8	15.3	10.3	14.3
United Kingdom	5.5	7.6	11.8	14.5	14.5	15.1	18.3
United States	6.4	7.3	11.4	14.4	14.4	6.1	9.1

Sources: Authors calculations based on OECD National accounts, OECD Social expenditure database and OECD Revenue Statistics.

References

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ANNEX 4.A3

DATA ON THE COST OF PRIVATE SOCIAL PROTECTION FINANCING

1. The financing of selected private social schemes in selected OECD countries

Two types of information can be collected, contractual contribution rates and implicit average contribution rates to private social schemes:

- The former is consistent with the OECD "Taxing wages" measure of the tax wedge, which is based on statutory rates for public social contributions and taxes. However, it would in many cases require some modelling work as there are often different schemes, rates often vary according to wage levels and there are ceilings.

- The latter is consistent with the tax implicit average effective tax rates described in the previous section. Implicit average contribution rates are calculated by dividing the contributions effectively paid by employers and employees by the associated total labour costs.

For practical purposes implicit average tax rates were collected for specific schemes in a number of OECD countries. The choice of schemes and countries was made based on the importance of the associated private social expenditures in current social expenditures, as well as in expected future expenditure for pension (information provided by the OECD Social Policy Division, Pension Unit). The Table below summarises information collected in selected OECD countries.

Table 4.A3.1. **Average effective payments to selected private social schemes in selected OECD countries**

As a percentage of gross wage

	Australia 2002-03	Ireland 2005	Hungary 2005	Netherlands 2005	Switzerland 2004	United Kingdom 2005	United States 2005
Pension							
Employer	8.8	6.7	-	-	13.4	14.1	7.9
Employee	-	4.6	5.0-6.9	-	9.7	5.7	n.a.
Workers coverage	*100*	*50*	*47-64*		*100*	*48*	*41*
Health							
Employer	-	-	-	2.4	-	-	13.0
Employee	-	-	-	3.6	-	-	3.6
Workers coverage	-	-	-	*20*	-	-	*70*
Work accident							
Employer	2.5	-	-	-	-	-	-
Workers coverage	*100*	-	-	-	-	-	-
Total private for covered workers	11.3	11.3	5.0-6.9	6.0	23.1	19.8	24.5
Memorandum: Direct tax wedge (% of gross wage), 2003	20.8	26.3	46.0	43.6	26.8	25.4	26.0

Source: OECD Secretariat based on national sources.

2. Country information

Australia	There are two important mandatory private schemes in Australia: "Workers compensation" is an occupational injury and accident scheme; "Superannuation" is a pension scheme, mandatory since 1992, with a statutory contribution rate of currently 9%. Implicit contribution rates for these two schemes were calculated based on various issues of *Labour costs Australia* of the Australian Bureau of Statistics for the years 1985-1989, 1993-1994, 1996-1997.
Hungary	The new pension system, in place since 1998, has three pillars and consists of a PAYG mandatory social pension insurance scheme, a mandatory private scheme and a fully funded voluntary private scheme. Participation in the public scheme and the mandatory private scheme is mandatory for all those who enter the labour market for the first time and are below 35 years of age (other persons had the right to join a mandatory private pension fund until 1 September 1999). Employees remaining in the public scheme continue to pay 8.5% contributions to the social insurance pension fund (the PAYG scheme). Members of the mixed system pay 0.5% contribution into the social insurance pension scheme and 8% contribution to the mandatory private scheme. Employers pay 18% contribution to the social insurance pension scheme, regardless of whether the employee is in the public or private second pillar (*Source*: Taxes and benefits country review 2006). The tax wedge measure of "Taxing wages" includes the 8.5% contribution and is thus representative of an employee contributing to the public second pillar. Private pensions covered in 2005 at a minimum 47% of the employed population and 64% at a maximum. These estimates are based on statistics of participation in private schemes provided by the Magyar Nemzeti Bank. The lower limit was calculated assuming that scheme participants of a given age class have the same activity rates as the overall age class population (this is a minimum since active persons are more likely to switch to the new system than non-active one). The upper limit corresponds to the assumption that all participants in the scheme are employed. Applying the same assumptions on the employment of members schemes, the average contribution rate is comprised between a minimum of 5% (if all are employed, which is unlikely) and a maximum of 6.9%.
Ireland	Private pension schemes are voluntary, but they have a broad coverage (50%) that the government intends to widen to 70% (OECD Pensions at a glance, 2005). Average effective contribution rates in 2002 were 6.7% for employers and 4.6% for employees (*Source* Irish Association of Pension Funds benefits survey).
Netherlands	There is no statutory obligation for employers to offer a pension scheme to their employees, but industrial-relations agreements mean that 91% of employees are covered (OECD Pensions at a glance, 2005). Data on health private insurance relates to 2005. In that year, people under a certain income level were obliged to take an health insurance under the Sickness Fund Act (ZFW), the others had to get a private insurance. In 2005, 20% of employees were privately (mostly voluntarily) insured for the medical expenses in the second compartment (there is also a third one, voluntary). Since 2006, the system has been reformed, and all employees are required to get private health insurance.
Switzerland	Mandatory occupational pensions were introduced in 1985. In 2004, the average effective contribution rate was 3.2% for employees and 4.5% for employers. In addition, employee and employers provide a voluntary top-up to these schemes, at an average effective rate of 6.5% and 8.9% respectively in 2004 (*Source*: Swiss Federal Social Insurance Office).
United Kingdom	The public pension scheme has two tier, which are complemented by a large voluntary private pension sector. 55% of employees "contract out" of the state second tier into either an occupational plan provided by an employer or an individual private pension scheme. In that case, they pay a lower rate of social security contribution when contracted out (*Source*: Pensions at a glance 2005). "Taxing wage" is based on the employee contributing to the state second pension. In 2005, the average effective contribution rate of employees was 5.7% (6.1% in the public sector and 5.2% in the private sector) while that of employers was 14.1% (15.5% in the public sector and 12.7 in the private sector) (*Source*: provided by the Office for National Statistics based on the Annual Survey on Hours and Earnings).
United States	Private health schemes, financed through the employer or individually, are very important in the United States, as the federal government does not guarantee universal health care. About 70% of all workers aged more than 16 were covered by an employment-based coverage in 2005 (S*ource*: EBRI Databook on employee benefit, Chapter 27, Health insurance coverage of workers). 42% of all workers were participating in an employment-based retirement plan in 2004 (*Source:* EBRI Issue Brief #286, 2005). 41% of all workers were participating in an employment-based retirement plan in 2005 (*Source*: EBRI Issue Brief #299, 2006). EBRI Databook on Employee Benefits, Chapter 2 (Finances of the Employee Benefit System) provides time series for the employer and employees outlays for selected employee benefits, in particular employer and employee payments for employment-based health schemes and employers payments for private pension schemes *www.ebri.org/publications/books/index.cfm?fa=databook*. Employees payments for private pension schemes are not provided (they are included in "personal savings"). Total compensation of workers is also available from the same source. Weighing total compensation by the coverage rate of workers for the various schemes, effective contribution rates can be estimated for employment-based health schemes and the employer's part of private pension schemes. These coverage rate are not available in corresponding time series though, and the estimates were calculated for 2005.

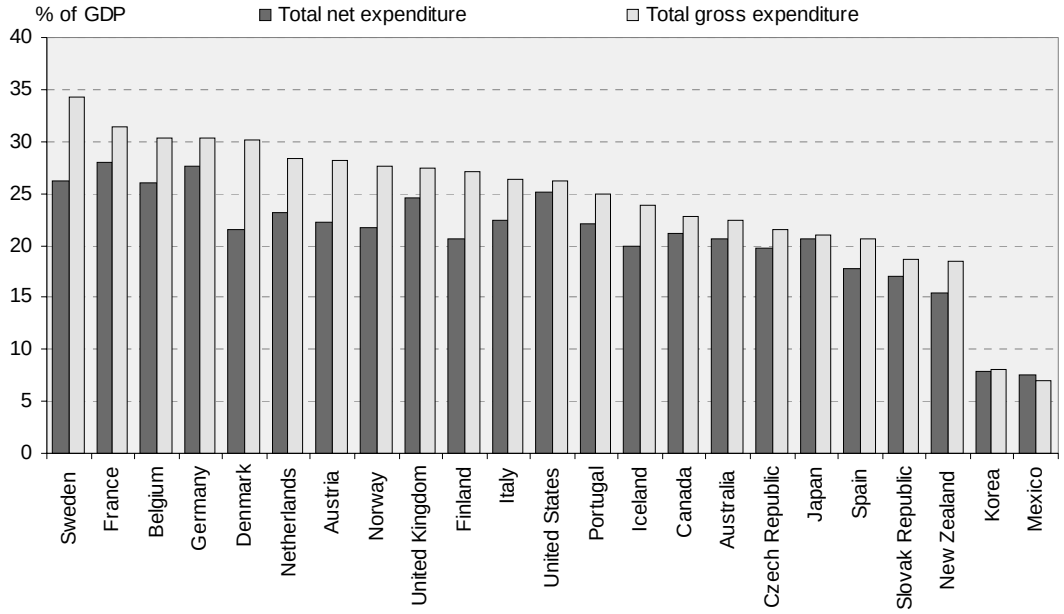
ANNEX 4.A4

SOCIAL EXPENDITURES: FURTHER MATERIAL

1. Net versus gross social expenditure

Leaving aside Mexico, Korea and Turkey, where social protection systems have not matured as yet, spending on social protection ranges from 17% of GDP in Ireland to a maximum of 34% of GDP in Sweden in 2003. Differences across countries are nevertheless more mute when looking at net social expenditures. Indeed, as shown by Adema and Ladaique (2005), a comparison of gross social spending does not provide a full picture of the collective social effort across countries, as it neglects impacts that the tax system can have on the value of social expenditures. On the one hand, governments can levy direct taxes and social contributions on cash transfers, as well as indirect taxes on the consumption made out of these transfers, which will reduce the amounts finally spent by governments. On the other hand, governments often pursue social policy through the tax system, by providing tax incentives that can be similar to cash benefits (e.g. child tax allowances) or aim at stimulate the provision of private social benefits (e.g. favourable tax treatment of health insurance provided by employers, and favourable tax treatment of private pension plans), which constitute additional expenditures.

Figure 4.A4.1 **Net versus gross social expenditure in 2003**



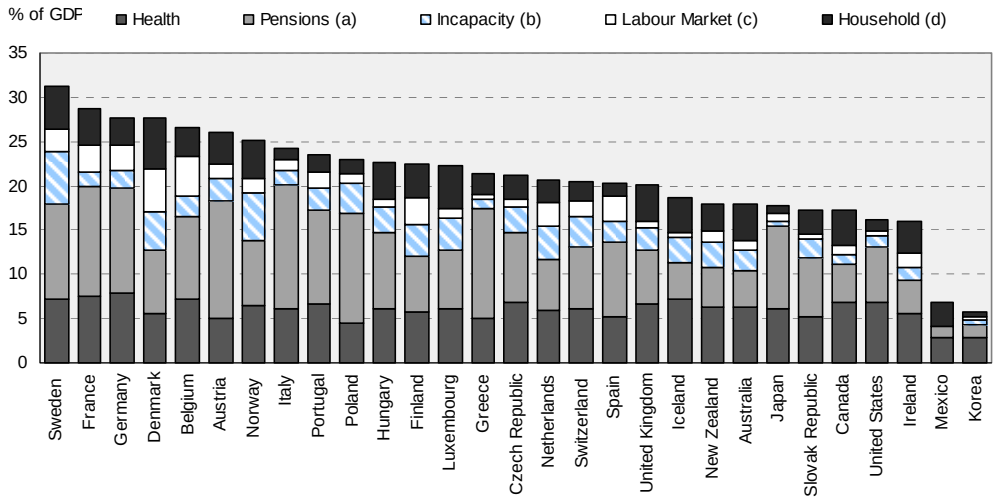
Source: Social Expenditure database (SOCX).

2. Public social expenditures by main areas

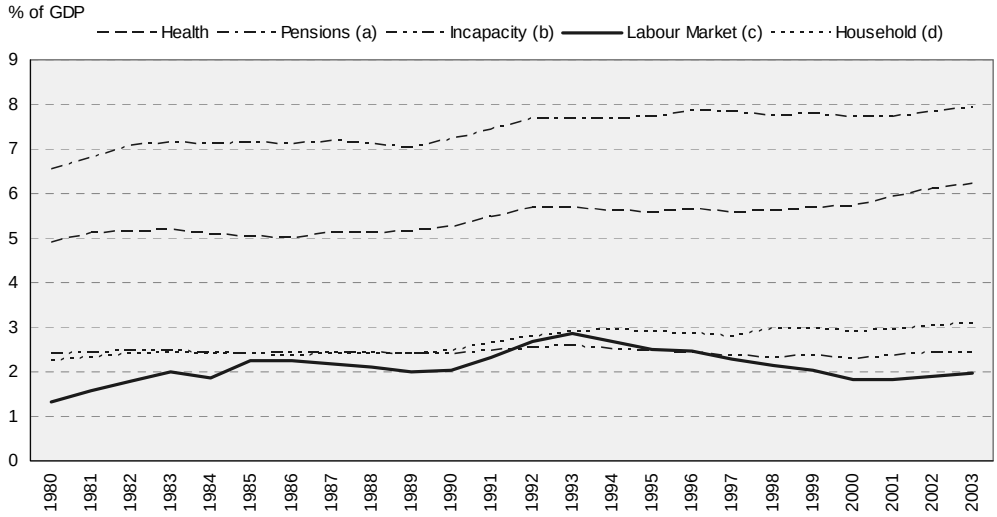
The main upward spending pressures come from health and pensions. Already now, government spending on pensions and health makes for two thirds of total government spending on social protection. Likewise, private spending on health and pensions is rising rapidly.

Figure 4.A4.2 **Public social expenditure programmes**

Panel A. Level in 2003



Panel B. Evolution, OECD average[e]



a) Old age and survivor's benefits.

b) Disability and sickness benefits.

c) Unemployment benefits and active labour market policies.

d) Family, housing and other social expenditure.

e) OECD average for 21 countries excluding Austria, the Czech Republic, Hungary, Iceland, Korea, Mexico, Norway, Poland and the Slovak Republic.

Source: OECD Social Expenditure database (SOCX).