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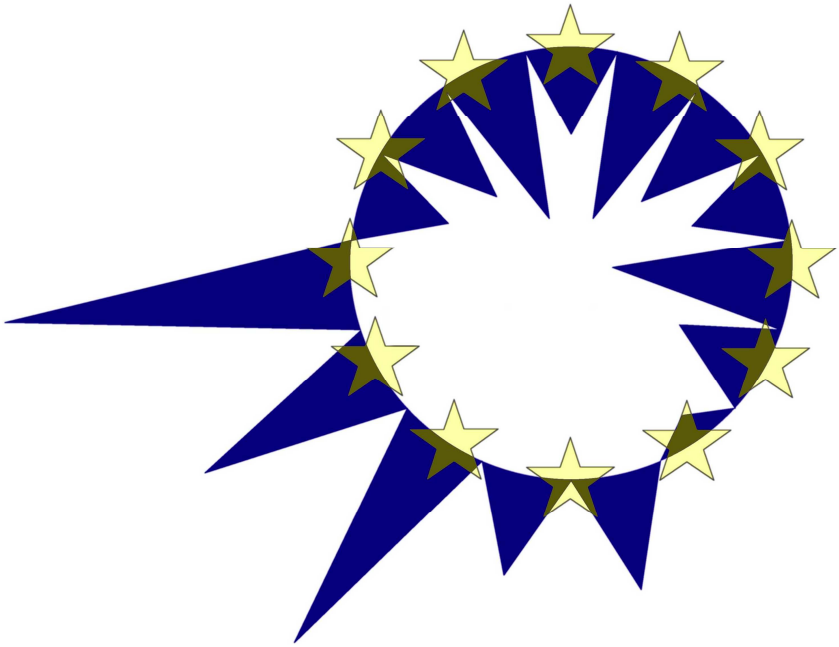
COUNTRY REPORT



EUROMOD Country Report

AUSTRIA
(2001 TAX-BENEFIT SYSTEM - REVISED)

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1. The Austrian tax-benefit system: an overview[1]

The size of the public sector in terms of revenues and expenditures is large in Austria. Despite this fact, there is evidence that its redistributive impact from high to low income classes is limited. On the revenue side, progressive income and property taxation is low but regressive social security contributions and indirect taxes are high. On the expenditure side, the principle of horizontal equity is prevalent and means testing is of hardly any importance.

In Austria, in 2001 the level of taxation amounts to 45,4 per cent of GDP (Statistik Austria 2003a, 543) and is above the already high EU average. While the high level of taxation in Austria indicates the high capacity of the public sector to affect the economy, the composition of public revenues implies a rather low degree of progressivity. In 2001 taxes on income and profits amount only to 31,5 per cent and taxes on property to 1.3 per cent of total tax revenues, that is, far below the EU and OECD average. On the other hand, social security contributions, taxes on goods and services and payroll taxes, with proportional or even regressive redistributive impact, made up more than two thirds of total revenue (Statistik Austria 2002, 544).

The level of total social (public and mandatory private) expenditure with regard to GDP is in Austria to some extent above EU-average and largely above OECD-average. In 2001 it amounted to 28,5 per cent of GDP (BMSG 2004) In 1998, the lion's share of social expenditures went to outlays related to old-age pensions, namely 36 per cent. This share is much higher than EU or OECD average where it is roughly one third. Also, expenditures on family policy are higher than on international average.

[1] This section draws heavily on and updates Guger, A. (1997), „Redistribution by the State in Austria", paper presented to the European Economic Association Conference, Toulouse 1997.

Table 1. Public sector revenues 2001 and social expenditures 1998 in Austria

REVENUES 2001		Direct taxation			Indirect taxation	
	Public sector revenues	Income and profit taxes	Social security contributions	Property taxes	Payroll taxes	Goods and services taxes
	% of GDP	% of total taxation*				
Austria	45,4	31,5	32,7	1,3	6,0	27,2
OECD	36,9	37,0	26,6	5,2	2,1	31,6
EU	41,0	35,9	27,7	4,8	2,2	29,5
EXPENDITURES 1998	Social expenditures	Old age+	Disability, Injury, Sickness+	Family	Unemploy-ment++	Health
	% of GDP	% of total social expenditures				
Austria	27,6	36,0	12,1	11,0	4,9	20,9
OECD	21,5	32,7	11,3	8,3	9,4	26,0
EU	24,9	33,5	9,3	8,7	10,4	23,9

* Difference to 100%: other taxes; + without "services for the elderly and disabled"; ++ including "active labour market programmes"

Source: Statistik Austria 2002, 544; Statistik Austria 2003a, 543; OECD Social Expenditure Data Base (2001)

1.1 The revenue side

1.1.1 Development

During the past three decades, property revenues have virtually exploded and the share of non-wage income in national income has increased (consequently, the wages share has declined). While the tax-income ratio of non-wage income components has decreased, the tax burden of wage and salary earners has significantly increased. Thus, non-wage income recipients have not only received an increasing share of national income, their tax burden has also declined. Therefore, wage earners have financed an ever increasing part of public sector activities. In 1970, the proportion of income tax paid by wage earners and pensioners amounted to 14.4 percent of direct taxation (including social security contributions) and the share of the income tax on non-wage income and corporate revenues amounted to 17.0 percent. However, by 1994, the proportion of income tax paid by wage earners and pensioners had increased to 24.9 percent of direct taxation while the share of income taxes paid out of non-wage incomes fell to 9.7 percent (Guger 1997).

There are several reasons for this declining tax burden on non-wage income: i) change in the 1970s from household to individual taxation, causing a sudden increase in the participation rate of spouses

of businessmen in smaller businesses and professionals; ii) increase of possibilities of reducing taxable profits; iii) significant change in the composition of non-wage: between 1970 and 1993, profits increased by 270 percent, but revenues from financial assets by 1.044 percent. Taxation of interest revenues could be avoided because of anonymous bank and capital accounts and a negligible amount of capital revenues had been taxed, until 1978. Then, a so-called "source tax" on interest payments of 7.5 percent was introduced, which has been increased to 25 percent (Capital Income Tax/"Kapitalertragsteuer") in the 1990ies. However, in exchange, asset taxes and death duties on financial assets have been abolished altogether.

1.1.2 Social security contributions

The social security system is financed by both employers and employees. For almost 90 percent of employees, their contribution to social security is the highest tax payment. In the private sector, there is a low threshold and a ceiling for social insurance contributions which means that people who earn less than the threshold fall out of the social insurance system[2] and people who earn more than the ceiling pay a constant amount which means in turn a ceiling to pensions and unemployment benefits. About 10 percent of employees are above the ceiling.

From a distributive point of view, the ceiling means that the redistributive impact of these social security contributions is regressive. In addition, social security contributions are tax deductible, thus reducing the degree of progressivity. Therefore, while employees in the lower half of the income distribution earn about 30 percent of total income, they pay nearly 34 percent of all social security contributions. Since 1983, the degree of regressivity of social security contributions has actually increased (Guger 1997).

1.1.3 Personal income tax (income tax on wages and pensions)

Income tax amounts to about one third of all taxes and to about 60 percent of all direct taxes. Apart from profits and capital revenues tax, the income tax on wages, salaries and pensions is the most progressive public revenue in Austria (the asset tax was abolished in 1993).

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[2] Nevertheless there is for example the possibility for opting-in in case of minor occupation (“geringfügige Beschäftigung”).

As a result of expansion in tax concessions, the Austrian income tax system had until the late 1980s been characterized by high marginal tax rates and a low and ever decreasing degree of progression. Therefore, a new income tax bill in the late 1980s aimed at lower marginal tax rates but higher taxable income by limiting tax concessions. Consequently, the degree of progressivity increased despite a reduction of the highest marginal tax rate from 62 to 50 per cent.

Nowadays the tax scale has four brackets from 21 percent (starting with an income of 50.000 ATS/year) to 50 percent, with the highest marginal tax rate applicable for taxable annual incomes above 700,000 ATS. In addition, a special flat rate of 6 percent applies to bonuses or other remunerations limited to one sixth of current income. Consequently, in Austria, almost every employee receives 14 monthly payments of which two months' payments are called bonuses. This flat rate taxation of some parts of remuneration lowers the highest marginal tax rate to 43.7 percent. On top of that, this flat rate also applies to severance payments which can – for employees in the old system – amount to up to 12 months' earnings.

The degree of progressivity is further substantially reduced by a number of tax concessions: i) social security contributions are a standard deduction; ii) there are a number of work-related tax concessions, such as expenses for further education; iii) there are tax concessions for special perennial expenses, such as premiums of private pension insurance, certain payments for residential housing, or the acquisition of specific bonds, etc.

However, since the tax reform of 1993, the degree of progressivity has been significantly increased: first, tax credits have been extended (but in 2001 partly tapered), and second, a form of negative tax has been introduced, so that if certain tax credits are higher than tax liability the tax office pays the taxpayer the difference.

1.1.4 Indirect taxation: Taxes on goods and services

Indirect taxation has been a rather large component of the Austrian taxation system. More than one quarter of all public revenues are taxes on goods and services, which is slightly below EU average, but, in addition, there are also payroll taxes of about 6 percent. The most important indirect tax is the value added tax. The normal VAT rate is 20 percent and there is a reduced rate of 10 percent for essentials like food, housing and printed matters like books and newspapers. VAT revenues amount to about two thirds of all indirect taxes. The rest are mainly other taxes on goods and services, duties, fees and user charges.

According to Guger (1997), the redistributive impact of indirect taxes in Austria is clearly regressive. In the lowest decile, indirect taxes amount to about a quarter of gross income, in the fifth decile, to 13.8 percent and in the top decile to 10.2 percent. Since indirect taxation is more or less proportional to expenditures in all income categories, the higher savings ratio in the higher income groups are the main reason for the regressive impact of indirect taxation.

1.2 The expenditure side

The expenditure side of the Austrian welfare state is dominated by the principle of horizontal equity. For most public benefits, entitlements are specified by categorical definitions, such as age, family status or economic status, independent of current income or assets. However, due to the social insurance system which is based on income-related contributions, pensions, unemployment benefit ("Arbeitslosengeld"), unemployment assistance ("Notstandshilfe") and sickness benefits are related to past income levels and social status (white- or blue-collar worker or public servant). Only social assistance, unemployment assistance, supplements to parental leave benefits ("Zuschuss zum Karenzgeld"), extended parental leave benefit ("Sondernotstandshilfe") and housing support are means tested. With the exception of pensions, all transfer payments are tax free.

1.2.1 Family support

Family support is rather generous in Austria. Tax credits and family allowances for two children amount to 18.6 percent of the gross income of an average production worker in the mid-1990s (Guger 1997). Only in Iceland, Luxembourg and Belgium are tax credits and family allowances higher than in Austria.

The most important single transfer payment to families is the age-related family allowance ("Familienbeihilfe"). In addition, there are child tax credits paid in cash together with the family allowance (constructed as negative tax and, thus, also granted when the allowee has little or no tax liability).

In addition to the regular maternity benefits and leave for 16 weeks for mothers ("Wochengeld"), waged or salaried mothers or fathers of new-born children are entitled to parental leave for one and a half years (an additional half a year is granted, if also the spouse takes parental leave). During this leave a flat rate parental leave benefit ("Karenzgeld") is paid. There is also special assistance ("Zuschuss zum Karenzgeld") for single mothers or couples with low income of the spouse and a continuing benefit ("Sondernotstandshilfe") up to one year if the mother can prove that she cannot

find appropriate day care that would enable her to accept a job. Besides these birth-related benefits there are also schooling-related benefits such as free text books in primary and secondary education (however, with retained amount) and free transport for pupils and subsidies in this regard for students who are entitled to family allowances.

These family-related benefits are mainly financed through the Family Allowance Fund which is funded by an earmarked payroll tax of 4.5 percent[3] and by income tax revenues. In addition, the Unemployment Insurance Fund contributes about 30 percent of parental leave benefits.

Guger (1997), confining the analysis to families with children, finds that family support is more or less evenly distributed; while in the lower deciles support per child is higher, in the upper deciles the number of children per family is higher. There are, however, important differences in the distributive impact of the various measures: birth-related benefits are more likely to assist middle- and low-income groups, where more young families are represented.

1.2.3 Unemployment insurance

The Austrian unemployment insurance system is not as generous as family support. In general, unemployment benefit ("Arbeitslosengeld") is granted for 20 weeks and up to 78 weeks for female employees over 55 years and male employees over 60 years of age. When the benefit period runs out, and no job has been found, unemployment assistance ("Notstandshilfe") is available. However, for granting unemployment assistance also the income of the spouse is taken into account.

For the 90 percent of employees who earn less than the ceiling of the social security system, the replacement ratio of unemployment benefit – which is not taxed – is 55-60 percent of the last net income (basic amount of unemployment benefit). In addition, there is a family supplement for each dependent family member.[4] The basic amount of unemployment assistance is paid at 92 to

[3] This payroll tax could be considered as the employees' contribution to finance family benefits since it was taken into account in wage negotiations when it was introduced.

[4] In detail: If the unemployment benefit would be less than ATS 281,20/day, the replacement ratio is increased from 55% up to 60%, if there is entitlement to family supplement up to 80%. The general upper-limit of the unemployment benefit is ATS 496/day.

95 percent of the basic amount of unemployment benefit.[5] Again there is a family supplement for persons with dependent family members.

According to Guger (1997), unemployment benefits and unemployment assistance are the most progressive public expenditures. This is linked to the fact that the probability of becoming unemployed is much higher in lower income classes than in the higher.

1.2.4 Education and health

Despite the fact that a larger proportion of outlays for primary and secondary education is distributed to the upper half of the population, this expenditure is still moderately progressive. However, expenditure at the university level has a regressive impact on the redistributive process. As for health expenditures – increasing as in the OECD area in general – although higher income classes receive a larger part of those expenditures due to the higher household size, health expenditures are clearly progressive (Guger 1997).

1.3 The net incidence of the public sector

In Austria, income and property taxes are low and only moderately progressive; this feature is due to a number of tax concessions which substantially lower the tax rate for high incomes. Indirect taxes and social security contributions, which have a regressive effect on the distribution, make up almost 70 percent of all public revenues. Thus, the degree of progression of public revenues is very moderate. In turn, public expenditures seem to have more of a redistributive impact, although eligibility, and hence the distribution of public expenditures, are dominated by the principle of horizontal equity and means testing is of little importance. Consequently, in absolute money terms, higher income classes in which incidentally the household size is larger receive most public benefits. Only unemployment benefits, unemployment assistance and supplement to parental leave allowances ("Zuschuss zum Karenzgeld") for single mothers or couples with low income of the spouse are, in absolute terms, distributed to a greater extent to low-income groups. In spite of this, in relation to income, low-income classes receive more public benefits than high-income groups. Thus, the expenditure side seems progressive. In sum, if there is redistribution by the state in Austria, it is by public expenditures rather than by public revenues (Guger 1997).

[5] 95% if the unemployment assistance does not exceed ATS 281,20/day; otherwise 92%. In addition there is an upper limit of the unemployment assistance depending on the duration of insurance.

2. Description of the modelled tax-benefit instruments

2.1 The scope of the simulation

The Austrian tax-benefit system is a rather complex one. This is mainly due to the complexity of the social insurance legislation, the number of different transfers and the "mix" of relevant administrative responsibility (federal, provincial, local). Due to the limitations of available micro-data, not all instruments lend themselves to simulation. In order to correctly interpret model results, it is therefore essential to clarify the scope of the simulations. In the following table, we will outline what parts are and are not included in the current version of EUROMOD. Of course, the amounts of non-simulated instruments may still play an important role in determining people's income situations (e.g., pensions). In general, therefore, amounts, which cannot be simulated are taken directly from the data (entry "Data" in the third column). However, in a few cases, information on instruments is neither simulated nor available from the micro-data ("None").

Table 2. Tax-/benefit-instruments simulated or taken from data

Instrument	Comments	Simulated / Data / None	% of GDP*, 2001
1. TAXES			
Income tax ("Einkommensteuer")	Federal Income Tax.	Simulated	9.28
Capital Income Tax ("KESt"+"KESt auf Zinsen ")		Simulated	0.97
Church Tax ("Kirchenbeitrag")	Not actually a tax: paid to and collected by the church.	None	0.19[2]
Property Tax ("Grundsteuer B")	Municipal tax on real estate. Based on official values ("Einheitswert") of real estate.	None	0.20
Value Added Tax ("Umsatzsteuer/MWSt")	See separate report on indirect taxes.	Simulated	8.14
Other indirect taxes ("Verbrauchsabgaben")	See separate report on indirect taxes.	Simulated	2.79
Estate and Gift Tax ("Erbschafts- und Schenkungssteuer")		None	0.08
2. SOCIAL INSURANCE CONTRIBUTIONS			
Non-Civil Servant Employees	Health Insurance	Simulated	3.57[5]

	Pension Insurance Unemployment Insurance Compulsory Union Contributions ("Kammerumlage") Housing Subsidy ("Wohnbauförderungsbeitrag") Building Worker Vacation- and Severance-Pay-Fund ("Bauarbeiter Urlaubs- u. Abfertigungskasse")	None	7.03[5] 1.85[5] 0.10[2] 0.29[5] 0.02[5]
Civil Servants	Health Insurance Pens. Ins. (incl. contr. pensioners) Housing Subsidy ("Wohnbauförderungsbeitrag")	Simulated	0.29[2, 5] 1.03[5] 0.07[2, 5]
Employers	Health Insurance Pension Insurance Unemployment Insurance Accident Insurance Bankruptcy Fund ("Insolvenzentgeltsicherung" Family Benefits Fund ("Familienlastenausgleichsfonds") Housing Subsidy ("Wohnbauförderungsbeitrag") Nightshift-Heavy Labour ("Nachtschichtschwerarb.Beitr.")	Simulated None	 0.51[7] [9] 1.54 0.01
Self-Employed	Health Insurance Pension Insurance Accident Insurance	Simulated	0.39 0.57 0.04
3. TRANSFER PAYMENTS (FAMILY)			
Family Benefit ("Familienbeihilfe")	Universal benefit for children	Simulated	1.28[10]
Short Term Pregnancy Benefit ("Wochengeld", "Betriebshilfe")		Data (partly; aggregated with other benefits)	0.14[11]
Maternity (Parental Leave) Benefit ("Karenzgeld"; "Teilzeitbeihilfe")		Data (aggregated with other benefits)	0.22
Maternity Allowance Supplement ("Zuschuss zum Karenzgeld oder zur Teilzeitbeihilfe")	Supplement maternity benefit for single Parents (universial) and low income couples (means tested).	Simulated	?
Small Children Benefit ("Kleinkindbeihilfe")	Income tested benefit for small children who are cared for by the parent(s).	Simulated	0.00…
Newborn health check bonus ("Mutter-Kind-Pass-Bonus")	Benefit paid as an incentive to have follow-up health checks done after birth of a child.	Simulated	0.00…

Family Hardship Compensation ("Familienhärteausgleich")	One-time benefit for cases where all other sources of assistance have been exhausted.	None	0.00…
Child Care Benefit for Unemployed ("Kinderbetreuungsbeihilfe")	Short-term benefit paid to enable unemployed people with children to partcipate in the labour market and/or training courses.	None	0.00…
Provincial Family Bonus ("Familienzuschuss der Bundesländer")[6]	Province specific income tested benefit for low income families with small children.	Simulated	[9]
SUBSIDISED KINDERGARTEN *("ÖFFENTL. KINDERGÄRTEN")*		None	0.37[12]
4. TRANSFER PAYMENTS (EDUCATION)			
Free use of public transport for students and apprentices ("Schüler- und Lehrlingsfreifahrt")	In-kind benefit	None	0.14
Student grants ("Schülerbeihilfe"; "Heimbeihilfe")	Means tested benefit for students who continue school beyond compulsory schooling.	Data (aggregated with other benefits)	0.02[13]
Provision of school books ("Schulbuchaktion")	In-kind benefit	None	0.04
Student grants (Higher Ed.) ("Studienbeihilfe")	Means tested benefit for students in higher education.	Data (aggregated with other benefits)	0.06[3]
Free accident insurance for students ("Beitragsfreie Unfallversicherung für SchülerInnen und StudentInnen")		None	0.00…
5. TRANSFER PAYMENTS (UNEMPLOYMENT)			
Unemployment Benefit ("Arbeitslosengeld")		Data (will be simulated in future versions of EUROMOD)	0.48
Unemployment Assistance ("Notstandshilfe")/Extended		Data (will be simulated in	0.25

[6] 2001 incl. Kaerntner Kindergeld.

Parental Leave ("Sondernotstandshilfe")		future versions of EUROMOD)	
6. TRANSFER PAYMENTS (SICKNESS, DISABILITY)			
Free Health Insurance for relatives ("Beitragsfreie Krankenmitversicherung für Angehörige")[7]		None	0.78[11]
Sickness Benefit ("Krankengeld")		Data	0.19[11]
Prescription fee waiver ("Rezeptgebührenbefreiung")	Income tested	None	0.03[11]
Health service cheque fee waiver ("Krankenscheingebührenbefreiung")	Income tested	None	0.03[11]
Accident pension ("Versehrtenrente")		Data	0.16[12]
Disability Benefit ("Pflegegeld")		Data (aggregated with other benefits)	0.78[12]
7. TRANSFER PAYMENTS (OLD AGE, SURVIVORS)			
Old Age Pension ("Alterspension"; "Ruhegenuss")		Data (aggregated with other benefits)	6.40[4]
Early Retirement Pension ("Vorzeitige Alterspension")		Data (aggregated with other benefits)	1.48[11]
Part-time Retirement Pension ("Gleitpension")		Data (aggregated with other benefits)	0.01[11]
Disability Pension ("Invaliditätspension")		Data	0.92[12]
Survivor Pension ("Witwen- und Waisenpension")		Data	1.62[4]
Minimum Pension Non-Civil Servants ("Ausgleichszulage")		Simulated	0.35

[7] In 2001 abolished for those who do not or have not raise(d) children.

Minimum Pension Civil Servants ("Ergänzungszulage")		Simulated	?
Extra Child Benefit for Pensioner Parents. Non-Civil Servants. ("Kinderzuschuss")		Simulated	0.01
Extra Child Benefit for Pensioner Parents. Civil Servants. ("Kinderzulage")		Simulated	0.00…
8. TRANSFER PAYMENTS (HOUSING)			
Social Housing ("Gemeindewohnungen")	Municipal in-kind transfer.	None	?
Subsidised Housing ("Objektförderung: Geförderte Miet,- Genossenschafts- und Eigentumswohnungen")	Responsibility of the provinces.	None	?
Housing Benefit ("Wohnbeihilfe")	Responsibility of the Provinces. Means tested. Only available if living in subsidised Housing.	Data	0.06[2]
Rent Subsidy ("Mietzinsbeihilfe")	Very low income limits - no longer important.	Data	0.00…
9. TRANSFER PAYMENTS (MINIMUM STANDARDS)			
Social Assistance (1) – Cost of Living ("Sozialhilfe – Hilfe zur Sicherung des Lebensunterhaltes")	Province specific. Means tested.	Simulated	0.20[8]
Social Assistance (2) – Exceptional Circumstances ("Sozialhilfe – Hilfe in besonderen Lebenslagen")	Province specific.	None	?
Exemption from telephone and public broadcasting fees ("Befreiung von Telephon-, Radio- und Fernsehgebühr")		None	?

* 2001: 2,915,216 Mio. ATS (Statistik Austria 2002)
Note 1: Sources: BMSG 2002, Hauptverband der österreichischen Sozialversicherungsträger 2002b, Kammer für Arbeiter und Angestellte 2001, Kammer für Arbeiter und Angestellte 2002, Statistik Austria 2002, Statistik Austria, http://www.statistik.at.
Note 2: Own estimate
Note 3: Bundesvoranschlag für 2000
Note 4: Sum of components from different years
Note 5: Employer contributions plus employee contributions
Note 6: Excluding civil servants and voluntary contributions
Note 7: Employer contributions plus self-employed contributions
Note 8: Sum of Social Assistance (1) (incl. sickness-help) and Social Assistance (2)
Note 9: reference statistics not available yet
Note 10: without Selbstträger

Note 11: Expenditure for 1999
Note 12: Expenditure for 2000
Note 13: Bundesvoranschlag für 2001

In the table below, we show those instruments that are simulated by EUROMOD. The order in the table (from top to bottom) represents the order in which the instruments ("policies") are computed in the model (e.g., employee social insurance contributions need to be computed before income taxes because they are tax-deductible). This is the so-called "policy spine" as represented by the EUROMOD parameter file "spine.xls". Note, that in the detailed description of instruments further below we do not follow entirely this sequence. Instead, we arrange the different instruments into three main groups (taxes, contributions and benefits) in order to provide a more intuitive overview of the Austrian system.

Table 3. Name and description of simulated policies

Policy Name	Policy Description
SBEN_CB_AT	*child benefit ("Familienbeihilfe"): basic amount*
SBEN_CBdis_AT	*addition to child benefit for disabled children*
IBEN_MaterYadd_AT	*Maternity Allowance Supplement Non-Civil Servants ("Zuschuss zum Karenzgeld oder zur Teilzeitbeihilfe")*
IBEN_MaterYaddCS_AT	*Maternity Allowance Supplement Civil Servants ("Zuschuss zum Karenzgeld oder zur Teilzeitbeihilfe")*
IBEN_PenChBon_AT	*Child Bonus for Pensioners ("Kinderzuschuss (ASVG)")*
IBEN_PenChBonCS_AT	*Child Bonus for Civil Service Pensioners ("Kinderzulage (PG)")*
EESICui_AT	*employee contributions to unemployment insurance*
EESIChousing_AT	*Employees' Contribution to Housing Subsidy ("Wohnbaufoerderungsbeitrag")*
EESICunion_AT	*Employees' Compulsory Union Contributions ("Kammerumlage")*
SESIChi_AT	*self-employed contributions to health insurance*
SESICpi_AT	*self employed contributions to pensions insurance*
SESICdi_AT	*self employed contributions to disability (accident) insurance*
IBEN_MinPen_AT	*Minimum Pension ("Ausgleichszulage")*
IBEN_MinPenCS_AT	*Minimum Pension for Civil Servants ("Ergaenzungszulage")*
EESICpi_AT	*employee contributions to pensions insurance*
EESIChi_AT	*employee contributions to health insurance*
ERSICui_AT	*employer contributions to unemployment insurance*
ERSICpi_AT	*employer contributions to pensions insurance*
ERSIChi_AT	*employer contributions to health insurance*
ERSICdi_AT	*employer contributions to accident insurance*
ERSIChousing_AT	*Employers' Contribution to Housing Subsidy ("Wohnbaufoerderungsbeitrag")*
ERSICfamben_AT	*Employers' Contribution to Family Benefits Fund ("Beitrag zum Familienlastenausgleichsfonds")*
ERSICbank_AT	*Employers' Contribution to Bankruptcy Fund ("Insolvenzentgeltsicherung", IESG)*

IT1_AT	*income tax*
SBEN_CBsupp_AT	*Child benefit: supplements for 2nd and further children*
SBEN_SCB_AT	*small children benefit (“Kleinkindbeihilfe”)*
SBEN_CBB_AT	*Newborn health check bonus ("Mutter-Kind-Pass-Bonus")*
SBEN_FamBonB_AT	*Family bonus Burgenland ("Familienzuschuss des Landes Burgenland")*
SBEN_ltmatbenK_AT	*Long Term Maternity Benefit Kaernten (Kaerntner Kindergeld)*
SBEN_FamBonK_AT	*Family bonus Kaernten ("Kaerntner Familienzuschuss")*
SBEN_FamBonN_AT	*Family bonus Niederoesterreich ("Niederoesterr. Familienzuschuss")*
SBEN_FamBonO_AT	*Family bonus Oberoesterreich ("Familienzuschuss des Landes Oberoesterreich")*
SBEN_FamBonS_AT	*Family bonus Salzburg ("Salzburger Familienfoerderung")*
SBEN_FamBonST_AT	*Family Bonus Steiermark ("Familienbeihilfe des Landes Steiermark")*
SBEN_FamBonT_AT	*Family bonus Tirol ("Erziehungszuschuss I u. II des Landes Tirol"; "Familienschilling des Landes Tirol")*
SBEN_FamBonV_AT	*Family bonus Vorarlberg ("Familienzuschuss des Landes Vorarlberg"*
SBEN_FamBonW_AT	*Family bonus Vienna ("Wiener Familienzuschuss")*
SBEN_saB_AT	*Social Assistance Burgenland ("Sozialhilfe Burgenland: Hilfe zur Sicherung des Lebensunterhaltes")*
SBEN_saK_AT	*Social Assistance Kaernten ("Sozialhilfe Kaernten: Hilfe zur Sicherung des Lebensunterhaltes")*
SBEN_saN_AT	*Social Assistance Niederoesterreich ("Sozialhilfe Niederoesterr.: Hilfe zur Sicherung des Lebensunterhaltes")*
SBEN_saO_AT	*Social Assistance Oberoesterreich ("Sozialhilfe Oberoesterreich: Hilfe zur Sicherung des Lebensunterhaltes")*
SBEN_saS_AT	*Social Assistance Salzburg ("Sozialhilfe Salzburg: Hilfe zur Sicherung des Lebensunterhaltes")*
SBEN_saST_AT	*Social Assistance Steiermark ("Sozialhilfe Steiermark: Hilfe zur Sicherung des Lebensunterhaltes")*
SBEN_saT_AT	*Social Assistance Tirol ("Sozialhilfe Tirol: Hilfe zur Sicherung des Lebensunterhaltes")*
SBEN_saV_AT	*Social Assistance Vorarlberg ("Sozialhilfe Vorarlberg: Hilfe zur Sicherung des Lebensunterhaltes")*
SBEN_saW_AT	*Social Assistance Vienna ("Sozialhilfe Wien: Hilfe zur Sicherung des Lebensunterhaltes")*

2.2 Income tax (*IT1_AT*)

2.2.1 Cost of earnings deduction ("Werbungskostenabzug", `at_it_EarnCost_ded`*)*

When calculating income tax, the first deduction used is the "cost of earnings" deduction. The amount of deduction from employment income (*empY_IL=empY*) is 1,800 ATS annually.

2.2.2 Deduction for single earners ("Alleinverdiener", `at_it_singearn`*)*

If the annual earnings of the partner does not exceed 30,000 ATS (60,000 ATS if the couple has child) the person is treated as single earner. For determining relevant partner earnings, the preferentially taxed part of any special earnings (such as 13th and 14th monthly salaries, parameter

OthEarn_IL) are subtracted (up to a maximum of 23,000 ATS per year: parameter *threshold*). The preferentially taxed part of special earnings is one sixth (parameter *annual_fraction*) of the regular annual earnings (*SingEarner_IL* minus *OthEarn_IL*).

2.2.3 Limited expenditure deduction ("eingeschraenkt abzugsfaehige Sonderausgaben", `at_it_exp_ded`*)*

Expenditures (*expenditure_IL=LimitedExp*) are deductible from earnings (*earnings_IL=earnings*) at a rate of 0.25 up to an annual ceiling of 40,000 ATS. An additional ceiling of 40,000 ATS/year comes to the regular ceiling if the person is single earner (see above), and 20,000 ATS/year is added for persons with more than 3 children. For incomes between 500,000 and 700,000 ATS/year the deduction is tapered (at 700,000 it is tapered to 0).

2.2.4 Church tax deduction ("Kirchensteuerabzug", `at_it_ChurchTax_ded`*)*

A maximum amount of 1,000 ATS/year (ceiling=1,000) is deductible for church tax. Not in fact simulated because no information on paid church tax in data.

2.2.5 Charitable donations deduction ("Abzug von Spenden an beguenstigte Institutionen", `at_it_donations_ded`*)*

Charitable donations are deductible from earnings up to the limit of 10% of the earnings. Not in fact simulated because no information on donations in data.

2.2.6 Exceptional costs deduction ("Aussergewoehnliche Belastungen", `at_it_ExceptCost_ded`*)*

Exceptional costs (*ExceptCost_IL=ExceptCost*, e.g. additional costs of disabled children) are deductible from taxable income (excluding tax credits, *income_IL=taxableY_ex_tfa*). However, for some of the exceptional costs the taxpayer has to contribute a retained amount, which increases with higher income (cf. Table 4).

Table 4. Annual income and retained amount exceptional cost deduction

Annual income	Retained amount
-100,000	6%
100,001-200,000	8%
200,001-500,000	10%
500,001-	12%

The retained amount is reduced by 1% point for each child and/or if taxpayer is entitled to single earners or lone parent tax credit.

Currently there are no entries in exceptional costs income concept (parameter *ExceptCost_IL*), since we don't have required variables in the data, consequently the effects of this deduction do not show up in the model.

2.2.7 Disability tax-free allowance ("Behindertenfreibetrag, `at_it_disab_tfa`*)*

Table 5 presents the annual amounts of tax-free allowance depending on the degree of disability.

Table 5. Degree of disability and annual disability tax free allowance

Degree of disability	Annual tax-free allowance
25-34%	996
35-44%	1,332
45-54%	3,324
55-64%	4,020
65-74%	4,992
75-84%	5,964
85-94%	6,960
95%-	9,984

The tax unit in this case is the family (*TAX_UNIT=CB_Family*). If the person receives care-benefit ("Pflegegeld"), the tax-free allowance is cut by the amount of the care-benefit.

2.2.8 Self assessment income tax-free allowance ("Freibetrag fuer zu veranlagende Einkommensarten", `at_it_selfass_tfa`*)*

The amount of tax-free allowance is 10,000 ATS/year. The income concepts for this allowance are *selfassY*, and *taxableY_ex_anyded*.

2.2.9 Tax-free allowance for agricultural workers ("Landarbeiterfreibetrag", `at_it_AgriWorker_tfa`)

The tax-free allowance amount is 2,340 ATS/year for agricultural workers.

2.2.10 Deduction of part of "Other Earnings" (`at_it_OthEarn_ded`)

"Other Earnings" ("Sonstige Bezuege") include e.g. 13/14 monthly payments, which are exempt from taxation at the normal rate structure. On other earnings below 8,500 ATS/year no tax is paid, the upper limit of preferential tax rate (*fixed_rate=0.06*) is 1/6 of annual income excluding other earnings (*annual_fraction=1/6*). The income concept for other earnings is *OthEarn_IL*, for overall earnings (including other earnings) is *empY+Pen.*

2.2.11 Common Tax Schedule (`co_it_schedule`)

Table 6 below, includes income brackets and rates for Austria.

Table 6. Income brackets and tax rates income-tax

Income brackets (ATS/year)	Tax rates
- 50,000	0% (1998: 10%)
50,001-100,000 (1998: 50,001-150,000)	21% (1998: 22%)
100,001-300,000 (1998: 150,001-300,000)	31 % (1998: 32%)
300,001-700,000	41% (1998: 42%)
700,001-	50%

Taxable income is rounded to full 100s (*round_base=100*). Temporary income tax (as if unemployment incomes were also taxable) is computed on the base of taxable income and unemployment income (*TaxableY_il=taxableY+unempY*), which is necessary for the progression adjustment (see module *at_it_progr_adj* below). The tax unit here is the individual.

2.2.12 General tax credit ("Allgemeiner Absetzbetrag", `at_it_gen_tcred`*)*

The general tax credit amount is 12,200 (1998: 8,840) ATS/year (*tcred_amt=12,200*). Depending on if someone receives wage earners/pensioners tax credit and/or single earner/lone parent tax credit there are several tapering rules. (1998: For incomes between 200,000 and 500,000 ATS/year the tax credit is tapered (at 500,000 it is tapered to 0). The income concept used here is *taxableY+unempY*.

2.2.13 Single earners' tax credit ("Alleinverdienerabsetzbetrag", `at_it_SingEarn_tcred`*)*

Single earners have a tax credit of 5,000 ATS/year. The tax unit is individual. If the tax is such low, that the single earner's tax credit does not come into effect, a negative tax up to 5,000 (1998: 2,000) ATS/year is refunded, if the person has a least one child (see `at_it_tcred_red`).

2.2.14 Lone parent tax credit ("Alleinerzieherabsetzbetrag", `at_it_lp_tcred`*)*

Lone parents (*TAX_UNIT=lp*) have a tax credit of 5,000 ATS/year. If the tax is such low, that the lone parent tax credit does not come into effect, a negative tax up to 5,000 (1998: 2,000) ATS/year is refunded, if the person has a least one child (see `at_it_tcred_red`).

2.2.15 Wage earners' tax credit ("Arbeitnehmerabsetzbetrag", `at_it_WageEarn_tcred`*)*

Wage earners tax credit is 750 (1998: 1,500) ATS/year[8], up to 22% of taxable employment income (*taxableEmpY*). The tax unit is the individual. If the tax is such low, that the wage earners' tax credit does not come into effect, a negative tax up to ATS 1.500 (unchanged to 1998) is refunded. However, this refunding is limited with 10% of annual social insurance contributions paid by the concerned person (see `at_it_tcred_red`).

[8] As a compensation for the reduction, the bonus for favoured pension-provision was increased by 750 ATS/year. As we have no adequate information from the data, this is not modelled.

2.2.16 Commuters' tax credit ("Verkehrsabsetzbetrag", `at_it_commut_tcred`*)*

Commuters have tax credit of 4,000 ATS/year up to 22% of taxable employment income (*taxableEmpY*). The tax unit is the individual.

2.2.17 Pensioners' tax credit ("Pensionistenabsetzbetrag", `at_it_pen_tcred`*)*

Pensioners have tax credit of 5,500 ATS/year up to 22% of taxable employment income (*taxableEmpY*). For pension-incomes between 230,000 and 300,000 ATS/year the deduction is tapered (at 300,000 it is tapered to 0) (1998: no tapering). The tax unit is the individual.

2.2.18 Income tax reduction (`at_it_red`*)*

Abolished by BGBl. Nr. 106/99. (1998: If income tax is below 9,400 ATS/year (*inctax_lt=9,400*), then income tax is reduced by the difference of 9,400 and the actual income tax amount).

2.2.19 Preferential tax of other earnings ("Sonstige Bezuege", `at_it_OthEarn_tax`*)*

On other earnings below 8,500 ATS/year (*OthEarn_tfa=8,500*) no tax is paid, the upper limit of preferential tax rate (*fixed_rate=0.06*) is 1/6 of annual income excluding other earnings (*annual_fraction=1/6*; cf. 2.2.10). Other earnings above this limit are taxed under regular scheme. If other earnings (before deduction of contributions) are below 23,000 ATS/year (*threshold*) then they are not taxable ("Freigrenze"). Tax on other earnings cannot be greater than *0.3*other earnings threshold* (23,000). The income concept used here is *empY+Pen*.

2.2.20 Progression adjustment ('Progressionsvorbehalt', `at_it_progr_adj`*)*

Tax progression is adjusted for recipients of unemployment income. The module computes the average tax rate resulting from all preceding modules (taking as the basis taxable income that includes unemployment benefits) and then applies this average tax rate to the actual taxable income (which excludes unemployment benefits). In reality, the rule for computing the average rate is a bit more complicated: a rate that would prevail if taxable income (*taxableY*) had been received all year. But the result may not exceed tax which would result if actual *taxableY* and *replacmentY* were taxed

together. The approach here produces the same result unless *empY+selfempY* is less than replacement income.

2.2.21 Child tax credit ("Kinderabsetzbetrag"; "Unterhaltsabsetzbetrag", `at_it_ch_tcred`*)*

The amount of child tax credit (for children in the same household) is 700 ATS/month and child (in 1998: 350 ATS/month for the first child, 525 ATS for the second and 700 ATS/month for each further child). For children, for whom maintenance payments are made, the amount of credit is 350 ATS/month for the first child, 525 ATS for the second and 700 ATS/month for each further child. If there are maintenance payments (made to other children) then in the model it is assumed that they are made for one child (but this child doesn't increase the number of children in the household for the purpose of computing the child tax credit). The relevant tax unit here is the family (*TAX_UNIT=CB_Family*).

2.2.22 Withholding Tax on Investment Income ("Kapitalertragssteuer", `co_schedule`*)*

The withholding tax rate on investment income (*Base_IL=invY*) is 25% (*rate1=0.25*).

2.3 Social insurance contributions

2.3.1 Employers' contribution to disability (accident) insurance (`ERSICdi_AT`*)*

As in most cases of benefits and contributions, different systems exist for civil servants and non-civil servants. The employer of civil servants (*IsCivSrv=1*) pays 0.47% (*rate1*) of the contribution base (*B-KUVG_base*).

If non-civil servants have special payments such as 13th and 14th monthly wages) their employers pay 1.4% (*rate1*) of the employees' wages (indifferent whether regular or special payments). The point of difference is that the upper threshold (*up_base_limit*) of the contribution base is 44,400 (1998: 42,000) ATS/month for the regular payment and 88,800 (1998: 84,000) ATS/year for the special payment. If non-civil servants do not have special payment, then their employers pay the same 1.4% on the wages, with an upper limit of 51,800 (1998: 49,000) ATS/month for the contribution base. Table 7 below, gives a summary of the contribution rules.

Table 7. Employers' contribution to disability (accident) insurance

	Lower base threshold*	Upper base threshold	Contribution (%)
Civil servants	0	-	0.47
Non-civil servants			
Special payments exist			
Regular payment**	0	44,400 (1998: 42,000)	1.4
Special payment***	0	88,800 (1998: 84,000)	1.4
*Special payments do not exist**	0	51,800 (1998: 49,000)	1.4

* within the disability (accident) insurance there is no threshold for minor occupation.
** monthly amount.
*** annual amount.

2.3.2 Self-employed contribution to disability insurance (`SESICdi_AT`*)*

Farmers pay rate of 1.9% (*rate1*) of the contribution base (*selfempY*). The lower income threshold is 7,521 (1998: 6,039) ATS/month (*threshold*), the upper limit of the contribution base is 51,800 (1998: 49,000) ATS/month (*up_base_lt*). Other self-employed pay a fixed annual amount of 1,072 (1998: 1,007) ATS for the disability insurance.

2.3.3 Employees' and Pensioners' contributions to health insurance (`EESIChi_AT`*)*

Again, we have to distinguish (1) public- and (2) non-public sector employees.

(1) Public sector employees and pensioners pay a basic rate of 3.7% (*rate*) of the contribution base (*B-KUVG_base*) and an additional 0.25% surcharge rate (*surcharge_rt*). For public sector employees and pensioners the lower income threshold is 6.660 (1998: no lower income threshold) ATS/month (*threshold*), for regular payments the upper limit of the contribution base is 44,400 (1998: 42,000) ATS/month (*up_base_lt*), for special payments the base limit is 88,800 (1998: 84,000) ATS/year (*up_spec_pay_lt*).

(2) To non-public sector blue-collar workers two different rates apply: those covered by the Continuation of Payment Law (Entgeltfortzahlungsgesetz, EFZG) pay a basic rate of 3.7% (*EFZGBluCol_rt*) of the contribution base; those not covered by EFZG pay a higher contribution, 4.3% (*BluCol_rt*). Since in the ECHP database there is no possibility to identify EFZG-covered and not covered workers, we assume that all blue-collar workers are covered by EFZG (this assumption is close to reality). Agricultural blue-collar workers' (Landarbeiter) contribution is again 3.7%

(*AgriBluCol_rt*), while white-collar workers pay a lower health insurance contribution: 3.15% (*WhitCol_rt*). Similarly to public servants, all non-public sector employees face a surcharge rate of 0.25% of their relevant incomes. The lower income threshold is 4,076 (1998: 3,830) ATS/month (*threshold*), on contribution bases under this amount no contribution is paid.[9] The ceiling on base for contributions paid on income excluding special payments – if there are special payments – is 44,400 (1998: 42,000) ATS/month (*up_base_lt),* which is 30 times the daily ceiling. The ceiling on the contribution base if there are no special payments is 51,800 (1998: 49,000) ATS/month (*no_spec_up_base_lt*) that is 35 times the daily ceiling, while the upper limit of the contribution base for the special payment is 88,800 (1998: 84,000) ATS/year (*up_spec_pay_lt*). If contributions are payable (i.e., if the regular contribution base excluding special payments is above the threshold) then all special payments up to the *up_spec_pay_lt* limit are subject to contributions.

The health-insurance contribution for non-civil servant pensioners is 3.75% (*rate1*) of their income (*penSIChi_base*), without any base-limits and upper limits.

2.3.4 Employer contributions to health insurance (`ERSIChi_AT`*)*

Employers of public sector employees and pensioners[10] pay a basic rate of 2.9% (*rate*) on the contribution base (*B-KUVG_base*) that also includes pensions. In addition to the basic rate, a surcharge rate of 0.65% applies (*surcharge_rt*). The contribution base includes the regular payments and special payments, as well. The lower income threshold is 6.660 (1998: no lower income threshold) ATS/month (*threshold*), the upper limit of the contribution base for public sector wages and pensions is 44,400 (1998: 42,000) ATS/month for regular payments (*up_base_lt*) and 88,800 (1998: 84,000) ATS/year for special payments (*up_spec_pay_lt*).

Again, different rates apply to employers of non-civil servant blue-collar workers accordingly whether the employees are covered by EFZG ("continuation of payment law") or not. Those covered pay a basic rate of 3,4% (1998: 6%[11]) (*EFZGBluCol_rt*) and an additional 0,25% surcharge rate (*surcharge_rt*), while non-covered face a 4.3% contribution rate (*BluCol_rt*) and an additional 0,25% surcharge rate (*surcharge_rt*). As for the employees' contributions, we assume that all the

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[9] If the threshold is exceeded then the entire base is subject to the relevant rate.

[10] Under the term "employer of pensioners" we understand either the social insurance authority ("Bundespensionsamt") or the enterprise (e.g. Austrian Railways) that pays out the pensions.

[11] 3.7% health insurance contribution plus 2.3% EFZG-contribution.

employees are covered by EFZG. The employers of agricultural blue-collar workers have to pay the same 3.7% (*AgriBluCol_rt*) plus 0,25% surcharge rate (*surcharge_rt*) as their employees. The employers of white-collar workers contribute to the health-insurance budget with 3.25% (*WhitCol_rt*; incl. complement-amount) plus 0,25% surcharge rate (*surcharge_rt*) of the wages. The lower threshold and the ceilings are the same as for the employees' contribution bases. While employees only pay voluntary health insurance contribution on "minor wages" (if sum of "minor wages" of employee is under threshold of 4,076 (1998: 3,830) ATS per month) employers have to pay 3.85% (*rate1*; if sum of "minor wages" of all employees exceeds 6,114 (1998: 5,745) ATS per month).

For "employers" of non-civil servant pensioners, i.e. the social insurance authorities the law specifies different health-insurance contributions, which have to be paid to into the fund of Central Association of Austrian Social Insurance Authorities (Hauptverband der österreichischen Sozialversicherungsträger). The pension insurance institutions for blue-collar workers, for salaried employees and the institution for business people pay a contribution of 7.575% (*rate1*) of the contribution base (*penSIChi_base*). The Insurance Institution for Austrian Railway within the Pension Insurance for Blue-Collar-Workers has to pay 18.15% (1998: 18.1875%), while the Insurance Institution for Austrian Miners contributes 14.025% (1998: 14.0625%) of the pensions paid out. Since we don't have sufficient data to distinguish between the above occupation categories, we assume that all people belong to the first institution. For non-civil servant pensioners no threshold and upper limits exist.

2.3.5 Self-employed contributions to health insurance (`SESIChi_AT`*)*

When describing the health insurance contributions for self-employed, we distinguish between farmers and other self-employed. Farmers pay 5.9% basic rate (*rate*) and a surcharge rate of 0.5% (*surcharge_rt*). They have to contribute on income between 7,521 (1998: 6,039) ATS/month (*threshold*) and 51,800 (1998: 49,000) ATS/month (*up_base_lt*).

Non-farmer self-employed people have a basic contribution rate of 8.4% (1998: 8.6%) (*rate*) and a surcharge rate of 0.5%[12] (*surcharge_rt*). The upper base limit of the contribution base (*GSVG_base*) is 51,800 (1998: 49,000) ATS/month (*up_base _lt*). The threshold depends on whether the self-

[12] Not including a special contribution for a birth-related benefit ("Betriebshilfe" of 0.05%), which only applies for a particular sub-group which cannot be identified in our data.

employed person is a member of the Austrian Economic Chamber or not. For members the threshold is 14,134 (1998: 13,761) ATS/month (*threshold_wk*), while non-members pay the contribution if the base exceeds 7,400 ATS/month (*threshold_se*). For the time being we don't have information about the chamber-membership, so we assume that nobody is a member of chamber; in other words we don't use *threshold_wk*. Another different threshold applies for partly self-employed (*GSVG_otherY>0*, i.e., if other income available), the lower limit of the contribution base is 4,076 (1998: 3,830) ATS/month (*threshold_part_se*). Different to 1998, contributions have also to be paid if other health-insurance contributions (ASVG or B-KUVG) have been paid.

2.3.6 Employee contributions to pension insurance (`EESICpi_AT`*)*

Similarly to other contributions, the law makes a distinction between civil servants and non-civil servants. Employees in the public sector who turn 60 years before 30.11.2019 pay 12.55%, those who turn 60 years after 30.11.2019 10.25% (1998: consistent 11.75%) (*rate1*) of their wages (*empY*) as pension insurance contribution, regardless of the amount of income. Civil service pensioners also pay pension insurance contribution: 2.1% (1998: 1.5%) (*rate1*) of their pensions (*pubpen*).[13]

The contribution of employees outside the public sector is 9.25% (regardless of the occupation) to which a 1% surcharge rate comes. The threshold for regular payments is 4,076 (1998: 3,830) ATS/month (*threshold*), the ceiling for contribution base excluding special payments – in case the employee has special payments – is 44,400 (1998: 42,000) ATS/month (*up_base_lt*), the limit of the special payments under which contribution has to be paid is 88,800 (1998: 84,000) ATS/year (*up_base_spec_lt*). Employees without special payments contribute under the monthly amount of 51,800 (1998: 49,000) ATS (*no_spec_up_base_lt*).

2.3.7 Employer contributions to pension insurance (`ERSICpi_AT`*)*

Employers of non-civil-servants pay a pension contribution of 9.25% (*EFZGBluCol_rt, BluCol_rt, AgriBluCol_rt, WhitCol_rt*) and a surcharge of 3.3% (*surcharge_rt*), irrespective of the occupation

[13] There are two sections (1a, 1b) in the policy file because we consider people to be civil service pensioners if they report they are OR if they report the receipt of a civil service pension. In the former case, the 2.1% are paid for all pensions, in the latter case only for the civil service pension (*CSpubpen*).

(blue-collar, white collar and agricultural blue-collar workers). The lower income threshold for the contribution base is 4,076 (1998: 3,830) ATS/month (*threshold*), ceiling for contribution base excluding special payments – in case the employee has special payments – is 44,400 (1998: 42,000) ATS/month (*up_base_lt*), the limit of the special payments under which contribution has to be paid is 88,800 (1998: 84,000) ATS/year (*up_base_spec_lt*). Employees without special payments contribute under the monthly amount of 51,800 (1998: 49,000) ATS (*no_spec_up_base_lt*).

If the contribution base is fewer than 4,076 (1998: 3,830) ATS/month (*le_incl_lt*) and the sum of minor wages paid exceeds 6,114 (1998: 5,745) ATS/month, employers contribute to the pension insurance budget with 12.55% (*rate1*) of the base.

2.3.8 Self-Employed contributions to pension insurance (`SESICpi_AT`*)*

Farmers ("Betriebsführer") pay pension insurance contribution of 14.5% (1998: 14%) (*rate*) on income between 7,521 (1998: 6,039) ATS/month (*threshold*) and 51,800 (1998: 49,000) ATS/month (*up_base_lt*).

Professionals (lawyers, doctors, journalists, etc.) have a different contribution rate (20%) and the limits for the contribution base are also different. Only incomes between 14,134 (1998: 13,761) ATS/month and 51,800 (1998: 49,000) ATS/month are to be considered as contribution base.

As in the case of other contributions, the law makes differences between members and non-members of the Austrian Economic Chamber. For members the income threshold, under which no contribution is paid, is 14,134 (1998: 13,761) ATS/month (*threshold_wk*), full time non-members pay the contribution above 7,400 ATS/month (*threshold_se*), while partly self-employed face a threshold of 4,076 (1998: 3,830) ATS/month (*threshold_part_se).* The contribution rate is 15% (1998: 14.5%) for members of the Economic Chamber, non-members and part-time self-employed pay 15% of their contribution base. For the time being we don't have information about the chamber-membership, so we assume that nobody is a member of chamber; in other words we don't use *threshold_wk*. The ceiling on the base for contributions is 51,800 (1998: 49,000) ATS/month (*up_base_lt).* In difference to 1998, contributions have also to be paid if early retirement age is reached. For the calculations we use the contribution base *GSVG_base,* and a person is to be considered as a partly self-employed if *GSVG_otherY* > 0.

2.3.9 Employee contributions to unemployment insurance (`EESICui_at`*)*

Employees (non-civil-servants) pay a contribution of 3% on wages between 4,076 (1998: 3,830) ATS/month (*threshold*) and 44,400 (1998: 42,000) ATS/month (*up_base_lt*), if the employee receives extra payments related to employment income. In this case the contribution has to be paid on special payments under the annual amount of 88,800 (1998: 84,000) ATS (*up_base_spec_lt*). The ceiling on the contribution base if the person has no special payments, is 51,800 (1998: 49,000) ATS/month (*no_spec_up_base_lt*).

2.3.10 Employer contributions to unemployment insurance (`ERSICui_at`*)*

Employers pay the contributions to unemployment insurance exactly according to the same algorithm as employees.

2.3.11 Employees' contributions to housing benefit ('Wohnbauförderungsbeitrag', `EESIChousing_at`*)*

In order to improve the position of (lower income) people on the housing market, *Bundesländer* have a special housing benefit, to which every employee – except agricultural workers (*IsBlueColl*, *IsAgriSec* = -2) – contributes with 0.5% (*rate1*) of his wages between 4,076 (1998: 3,830) ATS/month (*threshold*) and 44,400 (1998: 42,000) ATS/month (*up_base_lt*). On special payments no contribution is paid (*Base_IL=empY_exspec_Pay'*).

2.3.12 Employers contributions to housing benefit („Wohnbauförderungsbeitrag", `ERSIChousing_at`*)*

Employers pay the same amount of contribution, according to the same algorithm, as employees do.

2.3.13 Employees' Compulsory Union (or "chamber") Contributions („Kammerumlage", `EESICunion_AT`*)*

In Austria non-agricultural sector employees contribute to employee's chamber's budget on a compulsory base. Agricultural sector employees pay contributions to Agricultural Workers' chamber according to different rules, while civil servants do not pay chamber contributions at all.

Non-agricultural sector employees pay 0.5% (*rate1*) of their wages between 4,076 (1998: 3,830) ATS/month (*threshold*) and 44,400 (1998: 42,000) ATS/month (*up_base_lt*) to Federal Employees' Chamber. Contrary to other types of contributions, special payments do not constitute part of the contribution base *(Base_IL=empY_ex_specPay)*.

Agricultural blue-collar employees contribute to Agricultural Workers' Chamber, paying 0.75% (*rate1*) of the contribution base (4,076-44,400 [1998: 3,830-42,000] ATS/month). However, agricultural workers in Burgenland province pay their contributions – if any – to the Federal Employee's Chamber instead of the Agricultural Workers' Chamber, but we currently do not take it into consideration. Except Kaernten province, special payments are exempted from contribution payments. This exception (the case of Kaernten) is currently disregarded in the model.

2.3.14 Employers' Contribution to Family Benefits Fund („Beitrag zum Familienlastenausgleichsfonds", `ERSICfamben_AT`)

The contribution is paid by all employers (except for employers of civil servants, *iscivsrv=-1*) on the sum of all wages paid in the business. If this sum is lower than 20,000 ATS/per month then it is reduced by 15,000 ATS.[14] This detail is not taken into account in the model, because we don't know the sum of all wages. The contribution is 4.5% of the wages without upper limit. The income concept used to calculate this contribution is *empY*.

2.3.15 Employers' Contribution to Insolvency Fund ("Zuschlag Insolvenzentgeltsicherungsgesetz (IESG)", `ERSICbank_at`)

Insolvency Compensation Fund was established in 1978 to protect employees of insolvent companies. The fund takes over the payment of wages and social security contributions for 3 months as soon as insolvency proceedings are instituted. If staff members are dismissed during that time, the fund takes over payments during the period of notice and is also responsible for compensation payments. Contributions to the fund are made by the employers, who pay 0.7% of the total payroll with regard to the contribution base (for all those employees for whom they are liable to pay unemployment insurance contributions). The contribution base limits are the same, as in the

[14] In addition, enterprises that are founded between 1.5.1999 and 1.1.2003 do not have to contribute in the first twelve months of existence. Since we do not have information on that, it is not taken into account.

case of other contributions. When the employee does not receive any special payments the contribution is payable on wages between 4,076 (1998: 3,830) and 51,800 (1998: 49,000) ATS/month; when special payments are received, the threshold is 4,076 (1998: 3,830) ATS for the regular payments, while the ceiling is 44,400 (1998: 42,000) ATS monthly. Employers also have to contribute on special payments below 88,800 (1998: 84,000) ATS annually.

2.4 Benefits

2.4.1 Minimum pension (top-up) ("Ausgleichszulage", `IBEN_MinPen_AT`*)*

Minimum pension is paid in order to provide pensioners a minimum level of income, so people are eligible to this top-up benefit only if they are already entitled to pensions. This minimum level is 8,437 (1998: 7,992) ATS/month for single persons (*SingPay*).[15] The considered income (*MinPen_means*) contains all pensions, maternity allowance supplement, pregnancy benefit, investment income, other irregular lump-sum benefits, maintenance income, maternity payment, other regular primary income, private transfers and other regular cash payments. 13th and 14th monthly payments are disregarded when computing the means. For married persons in the same household, the minimum pension level is set to 12,037 (1998: 11,403) ATS/month, for each own child in the household, an additional amount of 898 (1998: 851) ATS is added to the minimum pension level. The child must be under 18, if he/she is older than 18 but under 27, then the child is treated a "child" from the benefit point of view only if he/she is in full time education or disabled and earns less than 3,151 (1998: 2,984) ATS/month.[16] So, in practice a pensioner gets *Ausgleichzulage* (the exact English translation might be "supplementary allowance") if his/her pension is less, than the minimum pension level relevant for the family; the amount he/she receives is the difference of the minimum pension level and his/her actual social security pension. Minimum pension top-up is paid 14 times a year (*rate1=2/12*). The relevant benefit unit is the family (*TAX_UNIT=MinPen_family*).

[15] For widow(er) pensions the same amount applies; for orphan pensions there are different amounts depending on age and status single/double orphan

[16] There is a disregard for apprentices of 2,057 (1998: 1,933) ATS/month.

2.4.2 Minimum pension for civil servants (top-up) ("Ergänzungszulage", `IBEN_MinPenCS_AT`*)*

All civil servant pensioners under the minimum pension level are eligible for this means tested benefit (*ge_inc=2, IsCivSrv=2*). The means (*MinPenCS_means*) is slightly different from non-civil servant pensioners and contains all pensions, child bonus for pensioners, company shares, unemployment benefits, employment and self-employment income and property income. 13th and 14th monthly payments are disregarded when computing the means. For the additional child amount, the child must be under 18, if he/she is older than 18 but under 26, then the child is treated a "child" from the benefit point of view only if he/she is in full time education or disabled and earns less than 4,077 (1998: 3,831) ATS/month. The relevant benefit unit is the family (*TAX_UNIT=PenChBonCS_family*). All other rules are the same as for non-civil servants.

2.4.3 Child Bonus for Pensioners ("Kinderzuschuss (ASVG)", `IBEN_PenChBon_AT`*)*

All pensioners with children (*ge_inc=2, ge_nch=2, ge_nch_lt=1*), who receive public pension (*ge_inc_lt=1, ge_inc_IL=pubpen_ex_minpen_ex_ChBon*) are eligible for this benefit. The child must be under 18, if he/she is older than 18 but under 27, then the child is treated a "child" from the benefit point of view only if he/she is in full time education or disabled. The monthly amount of the benefit is 300 ATS, which is paid 14 times a year, so the actual monthly amount is 466,67 ATS (400*14/12, *SingPay=466,67*) (1998 350 ATS [300*14/12]) per child. The relevant benefit unit is the family (*TAX_UNIT=PenChBon_family*).

2.4.4 Child Bonus for Civil Servant Pensioners ("Kinderzulage (PG)", `IBEN_PenChBonCS_AT`*)*

All persons who receive public pension and have children in household (according to *PenChBonCS_family* definition) are eligible for the benefit. (*ge_inc_lt=1, ge_inc_IL=pubpen_ex_minpen_ex_ChBon, ge_nch_lt=1).* The monthly amount of the benefit is 200 ATS, which is paid 14 times a year, so the actual monthly amount is 233.33 ATS (200*14/12, *SingPay=233.33*). The relevant benefit unit is the family (*TAX_UNIT=PenChBonCS_family*).

2.4.5 Maternity Allowance Supplement Non-Civil Servants ("Zuschuss zum Karenzgeld oder zur Teilzeitbeihilfe", `IBEN_MaterYadd_AT`*)*

a) No spouse in the household and spouse is not maintaining child

Persons are eligible for this benefit if

- No spouse lives in the same household (*NotIsPartnerInHH1=2*), and
- The other parent does not maintain the child (*le_inc=2, le_inc_IL=maintY*).

Persons are not eligible if they do not receive maternity benefit (*le_inc1=-1, le_inc1_IL= maternity_ben*). The relevant benefit unit is the individual (*TAX_UNIT=individual*). The daily rate of the benefit is 83.4 (1998: 82.2) ATS (*SingPay=83.4*), for receivers of part-time-allowance ("Teilzeitbeihilfe") the half. For the time being we don't have information about part-time-allowance, so we assume that everyone gets the full benefit. As the entitlement to Maternity Allowance ("Karenzgeld") is lost, if the income of the receiver exceeds the limit for minor employment (4,076 [1998: 3,830] ATS/month), we modeled, that entitlement to Maternity Allowance Supplement is lost, if the receiver works more than 12 hours a week (*es_ge_hrs_lt=12*).

b) Living with spouse

Persons are eligible for the benefit if they receive maternity benefit (*ge_inc=1, ge_inc_IL=1*), but eligibility is lost if addition to maternity income is already greater than zero in this unit (*Tubenelig=-1, TUbenelig_name= cosim_polout*). Persons are also not eligible if spouse is not living in the same household (*NotIsPartnerInHH1=-1*). The income concept used for calculating means is *UnempY_means* that includes employment and self-employment income, company shares and sickness benefit. A monthly amount of 5,863 (1998: 5,696) ATS is disregarded for the spouse's income, and an additional 2,953 (1998: 2,870) ATS/month for each dependent person in the family (*disreg_amt=5,863; depend_disreg_amt=2,953*). The amount of the benefit is 83.4 (1998: 82.2) ATS daily (*SingPay=83.4*), which is suspended according to the same algorithm as in the case of single mothers (see above) if mother is working.

2.4.6 Maternity Allowance Supplement Civil Servants ("Zuschuss zum Karenzgeld oder zur Teilzeitbeihilfe", `IBEN_MaterYadd_AT`*)*

The rules are the same as for Non-Civil Servant, except that the monthly rate of the benefit is 2,535 (1998: 2,500) ATS (*SingPay=2,535*) and therefore somewhat higher.

2.4.7 Social Assistance Vienna ("Sozialhilfe Wien: Hilfe zur Sicherung des Lebensunterhaltes" `SBEN_saW_AT`*)*

Social assistance rules are different in all provinces, but the (formal!) differences in the systems are mainly in the amount of means and disregard-values, that is why we describe here only the system of Vienna province (for details of other provinces see Parameter Sheet). Another point that has to be mentioned is that local authorities can exercise significant degrees of discretion in determining eligibility and amounts of social assistance. In the model we do not attempt to take into account these 'discretionary' dimensions.

Children, persons in education and recipients of minimum pension (incl. civil servants' minimum pension) are not eligible for social assistance (*IsChild1=-1, InEd=-1, TUbenelig1=-1, TUbenelig2=-1, TUbenelig1_name= at_iben_minpen, TUbenelig2_name= at_iben_minpenCS*). The income concept used for calculating means is *sben_meansW* (see details in the Income List). The means is summed up with capital income (*capital_il= SBEN_capital*) for which 5,022 (1998: 0) ATS are disregarded for non-long-term recipients, 30,000 (1998: 10,000) for long-time-recipients living alone and 40,000 (1998: 20,000) ATS for cohabiting long-time-recipients. Social assistance is 5,220 (1998: 4,945) ATS per month (*SingPay=5,220*) for singles and 5,089 (1998: 4,822) ATS for supported people with family. If there are dependent persons in the family, the benefit is higher by 2,614 (1998: 2,476) ATS if this person does not receive child benefit, by 1,565 (1998: 1,483) ATS if this person receives child benefit. The benefit unit is the family (*CB_family*, including dependent adults).

Disabled family heads or family heads in pension-age (males above 65, females above 60) receive a monthly flat amount of 2,901 (1998: 2,747) ATS if the benefit unit contains one person; the amount of the supplement is 3,883 (1998: 3,677) ATS/month in case of a more-person benefit unit. In this cases the benefit is also paid 14 times a year instead of 12 times. However, with these two additional payments the need for rent and heating is covered. Families who receive Social Assistance only 12 times a year and "need" rental and/or heating support, receive additional amounts. The upper-limit of rental support is 3,241 ATS/month for 1-2 persons, 3,432 ATS/month for 3-4 persons, 3,744 ATS/month for 5-6 persons and 4,056 ATS/month for seven or more persons (1998: consistent 3,116 ATS/month), the heating support is ATS 509,83/month (for seven months ATS 874/month) (1998: 483/month [for seven months ATS 828/month]).

2.4.8 Newborn health check bonus ("Mutter-Kind-Pass-Bonus", `SBEN_CBB_AT`*)*

For mothers undertaking (free) health check after birth, a lump sum of 2,000 ATS is paid if total taxable income of the couple (*TAX_UNIT=couple*) does not exceed 532,800 (1998: 462,000) ATS/year (*ge_inc_lt=532,800; ge_inc_IL=taxableY*). Since we cannot identify mothers who do this check, we assume, that everybody does. Austrian citizens or persons living more than 3 years in Austria receive newborn health check bonus. We assume that people who are not AT/EU citizens are not in Austria for three years or do not take up this benefit.

2.4.9 Small children benefit ("Kleinkindbeihilfe" `SBEN_SCB_AT`*)*

Austrian citizens or persons living more than 3 years in Austria receive small children benefit, if they do not get any kind of maternity benefit (*ge_inc=-1, ge_inc_IL=maternity_ben*). The unit must be eligible as a whole; with other words benefit unit is the couple (*TAX_UNIT=couple*). In addition the unit's taxable income (*earnings_IL=taxableY*) must not exceed a monthly limit of 12,037 (1998: 11,403) ATS plus 898 (1998: 851) ATS per child. If the unit is eligible, then receives 1,000 ATS/month.

2.4.10 Family Bonus - Vienna ("Wiener Familienzuschuss", `SBEN_fambonW_AT`*)*

In this section we describe family bonus rules in Vienna province, which (in its logic) is similar to the rules of other provinces, so we do not provide detailed description of other provinces here (for details see Parameter Sheet).

Austrian citizens living in Vienna for at least one year or other persons living more than 3 years in Vienna (*Eq_Var1=2, Eq_Var1_name=atPROVNC, Eq_Var1_lt=1*), receive family bonus after children between the age of 1 and 2 (*ge_chage=1, le_chage=2*).

Recipients get different amount depending on the per capita equivalised net income of the family (the income concept *fambonW_netY* is used, for details see Income List). The equivalence scale is the following: 1 for the first adult, 0.8 for other adults, 0.5 for each child, an additional weight of 0.35 is used if the head of unit (*CB_Family*) is a lone parent. Table 8 below, gives the per capita upper limits for the net income and the amount of family bonus received.

Table 8. Per capita upper limits for net income and received family bonus Vienna

Per capita upper limit for net income (ATS/month)	Amount of family bonus (per family)
4,600	2,100
4,700	1,960
4,900	1,820
5,100	1,680
5,300	1,540
5,500	1,400
5,700	1,260
5,900	1,120
6,100	980
6,300	840
7,000 (1998: 6,500)	700

2.4.11 Child benefit ("Familienbeihilfe", `SBEN_CB_AT`*)*

Families receive child benefit for each child in the family (child must be under 19, if he/she is older than 19 but under 26, then must be in full time education or disabled, *TAX_UNIT= CB_Family_age25*). The amount of child benefit is 1,450 (1998: 1,300) ATS/month until children's age of 9; from 10 to 18 the benefit is 1,700 (1998: 1,550) ATS, and families with children between 19 and 25 receive a monthly amount of 2,000 (1998: 1,850) ATS. For every 2nd child, a supplement of 175 ATS/month, for every 3rd and further child an additional of 350 ATS/month is added to the benefit (1998: no supplement). There is also a means-tested More-Children-Supplement: if the taxable income of the family is less than 518.400 ATS/year, the family receives for every 3rd and further child a supplement of 400 ATS/month (1998: no means-tested More-Children-Supplement). Finally, if the children is disabled, an additional 1,800 (1998: 1,650) ATS/month is added to the benefit.

3. Data

3.1 General description

The dataset used for EUROMOD is the Austrian version of the European Community Household Panel (Production Version), provided by the Interdisciplinary Centre for Comparative Research in the Social Sciences (IFS/ICCR), Vienna.

The Austrian panel was started in 1995 after the country entered the European Union (it is the only household panel in the country). The sample was designed by Statistics Austria, while the fieldwork was done by two public opinion research institutes, IFES and FESSEL (Giorgi 1996).

For EUROMOD, we use the fifth Austrian wave (1999) containing income information pertaining to 1998 (uprated to 2001; see below). The dataset contains comprehensive information about labour market situation, living- and income condition of Austrian households. The panel follows about 3-4.000 households with 8-9.000 individuals. The questions regarding to labour market information and income situation are asked from the household members aged 16 or over.

3.2 Sample selection, weighting

As mentioned above, the sampling was designed and drawn by STATA: it is a multistage stratified random sample. The data were collected between October 1999 and February 2000 and contain information about 7,386 individuals in 2,677 households. The detailed description of EUROMOD variables and their source variables from ECHP can be found in Annexes A and B.

The weighting was done by EUROSTAT following the Iterative Proportional Fitting Method of Demming (Giorgi 1996) in four stages. First the design weights were computed to correct the differences in selection probabilities, then non-response weights were added. During the third stage the households weights were calculated, using the following classification variables: household type and size, type of community, tenure, number of economically active persons, distribution of economically active population aged 16 or more. Finally the individual correctional weights were associated with the previous weights to adjust the distribution of the population at the individual level according to age, gender, education and occupational level.

3.3 Net to gross conversion

For calculating gross values from net income data, we followed different approaches for different income components. A description of the ‘grossing-up’ methods can be found in Annex A.

3.4 Uprating factors 1998-2001

Table 9 presents the income components and the corresponding uprating factors used:

- consumer price index 1998-2001: used for gross private pension benefit payments (coPRVPEN) and as default uprating factor
- employment income index (development of median of unstandardised gross income of employees [white collar workers, blue collar workers, public contractors and civil servants]) 1998-2001: used for employment income (coEMPY), maintenance income (coMAINTY), other private transfers received (coPRVTRN), lump sum income (coLUMPY), other regular primary income (coOTHERY), pension contributions (coPENCON), other earnings („Sonstige Bezüge; atOTHEAR), redundancy payments (atREDUND), sickness benefit (atSICBEN), and maternity payments (coMATERY/atPREGNC)[17]
- self employment income index (development of median of income from business enterprises and self-employed-work 1998-2000[18] times development of median of unstandardised gross income of employees 2000-2001): used for self employment income (coSLFEMY)
- investment income index (development of secondary market rate of return ["Sekundärmarktrendite"]) 1998-2001: used for investment income (coINVY)
- rent index (development of accomodation-cost per square meter) 1998-2001: used for property income (coPROPY), rent (coRENT), compulsory service charges (coSVCHRG), other housing costs (coOHCOST), and imputed rent (coIMPRNT)
- dividend rate of return index (average dividend rate of return) 1998-2001: used for income from company shares received (atCOMP)
- unemployment income index (development of median of unemployment benefit ["Arbeitslosengeld"]) 1998-2001: used for unemployment benefit (atUNEMPY)
- unemployment assistance index (development of median of unemployment assistance ["Notstandshilfe]) 1998-2001: used for unemployment assistance (atUNEMPB)
- pension index (average adjustment of pensions) 1998-2001: for social insurance pensions (atSIBPEN), civil servant's pensions (atCIVPEN), early retirement pensions (atEARPEN),

[17] Both variables consists of pregnancy benefit ("Wochengeld") and allowance for parental leave ("Karenzgeld"). There should be an separate uprating factor for the allowance on parental leave, but as the two components cannot be divided, we decided to uprate the variables with the employment income index.

[18] Only data for 2000 available yet.

other old age related schemes or benefits (atSPCPEN), invalidity pensions (atINVPEN) and survivor pensions (atSURPEN)[19]

- caring benefit („Pflegegeld“; atCARE) has not been increased between 1998 and 2001, so a factor of 1 ist used.
- mortgage interest index (average interest rate on mortgage loans) 1998-2001: used for mortgage interests (coMORINT)

Table 9. Uprating factors 1998-2001

default	all	1,057 Consumer Price Index
coEMPY	pers	1,054 Employment Income Index
coSLFEMY	pers	1,046 Self-Employment Income Index 98-00 * Employment Income Index 00-01
coINVY	pers	1,148 Investment Income Index
coPROPY	pers	1,052 Rent Index
coMAINTY	pers	1,054 Employment Income Index
coPRVTRN	pers	1,054 Employment Income Index
coLUMPY	pers	1,054 Employment Income Index
coOTHERY	pers	1,054 Employment Income Index
coPRVPEN	pers	1,057 Consumer Price Index
coPENCON	pers	1,054 Employment Income Index
atOTHEAR	pers	1,054 Employment Income Index
atCOMP	pers	1,073 Dividend Rate of Return Index
atREDUND	pers	1,054 Employment Income Index

[19] For supplementary pensions („Ausgleichszulage“/“Ergänzungszulage“; AtWELPEN), 13./14minimum pension payments (atOTHWEL), special pension payments (atOTHPEN), and survivors means tested pension scheme („Ausgleichszulage“/“Ergänzungszulage“ Hinterbliebene; atWELWID) and uprating factor of 1 is „used“ due to the fact that uprating is not necessary because those benefits are either simulated or calculated with other variables.

atUNEMPY	pers	1,002	Unemployment Benefit Index
atUNEMPB	pers	0,986	Unemployment Assistance Index
atSIBPEN	pers	1,034	Pension Index
atCIVPEN	pers	1,034	Pension Index
atWELPEN	pers	1	don't update
atOTHWEL	pers	1	don't update
atEARPEN	pers	1,034	Pension Index
atOTHPEN	pers	1	don't update
atSPCPEN	pers	1,034	Pension Index
atINVPEN	pers	1,034	Pension Index
atWELWID	pers	1	don't update
atSURPEN	pers	1,034	Pension Index
atSICBEN	pers	1,054	Employment Income Index
atCARE	pers	1	Caring Benefit Index
coMATERY	pers	1,054	Employment Income Index
coRENT	hh	1,052	Rent Index
coSVCHRG	hh	1,052	Rent Index
coOHCOST	hh	1,052	Rent Index
coIMPRNT	hh	1,052	Rent Index
atPREGNC	pers	1,054	Employment Income Index
coMORINT	hh	1,177	Mortgage Interest Index

4. Validation

The output was produced with EUROMOD version 24A.

4.1 Aggregate validation

4.1.1 Distribution of employment income

Since employment income is a main source for the simulation we present here two tables (10 and 11) that allow us to make comparisons with official income statistics[20]. In the EUROMOD database mean of gross employment income is 33,195 ATS/month for males, 19,274 ATS for females and 27,403 ATS for both genders. The reference values are 32,706 ATS for males, 19,710 ATS for females and 26,834 for the whole population (Rechnungshof 2002, 171), implying that all in all we slightly overestimate aggregate employment income[21]. We get a more detailed picture if we compare decile information for EUROMOD data with external sources. Table 11 shows that we overestimate employment income more at the bottom deciles. The mismatch of ECHP based net earnings for lower deciles is known and documented in Till/Tentschert (2000). Some of the discrepancies documented in Table 11 might also be a result of our methodology for converting income information from net to gross (see section 3.3).

4.1.2 Distribution of pension income

Table 13 shows the distribution of pensioners' yearly gross income by gender. While in lower income groups pension income is slightly over-estimated in EUROMOD, in higher income groups it is slightly under-estimated.

4.1.3 Distribution of household income

As many benefits are means-tested and depend on the (equivalised) household-income, table 12 shows the net-household-incomes by number of children in household generated by EUROMOD compared to reference statistics. All in all, (equivalised) household-incomes seem to be slightly underestimated by EUROMOD – especially if keeping in mind that the reference-statistics are for the years 1999/2000.

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[20] In the Data Requirement Document we present the descriptive statistics of variables used in EUROMOD database. For the EUROMOD-income variables, the figures in the tables are the values from the ECHP for 1998 updated to 2001.

[21] We use the same definition for monthly income as in Statistik Austria 2002, namely 1/12 of the annual employment income.

4.1.4 Validation of simulated tax/benefit components

Since for Austria, EUROMOD is the first microsimulation model we can compare our simulated components only to reference sources, namely to available official statistics. In some cases the reference statistics are accessible yet, in some cases it will be in the near future (with the exception of a few components). The results of our simulation and the number of tax/social insurance contribution-payers[22] respective benefit receivers are shown in Tables 14 and 15.

For *unemployment insurance contributions* (only non-civil servants and their employers pay this contributions) we estimate 92% of the real sum of contributions paid.

The simulated *pension insurance contributions for employees* (excl. civil servants and voluntary contributions) are also close to reality: in EUROMOD we simulate 91% of the contributions paid in. This ratio is based on the sum of employees' and employers' contributions.

For *health insurance contributions for employees* (incl. civil servants), *unemployed and pensioners* the ratio of simulated and actual sum of contributions is 113%. Only to a small extent we can explain this with the over-estimated number of people on minor wages and the resulting overestimation of employer-contributions on minor wages, which is 3.85%.

The simulated results of *self-employed contributions to pension insurance* are not so bad (82% of real contributions), given the usual under-reporting problem of self-employment. This may to a small part be due to the fact that we cannot identify whether someone is a member of the Austrian Economic Chamber (a higher threshold would apply for members, see for details the system description). In addition we assumed every farmer as "Betriebsführer", for whom both threshold and upper limit are much higher. In the other direction go the facts, that we do not take into account "Weiterversicherung" in BSVG, GSVG and FSVG and that we assume all self-employed people not to pay a special contribution for a birth-related benefit ("Betriebshilfe" 0.05%), which in reality applies for a particular subgroup.

The *contributions of self-employed to health insurance* are also under-estimated (63%), partly explained by the fact that we underestimate the number of contribution payers by more than 35%.[23]

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[22] Note that for all social insurance contributions, for which reference statistics are available yet, the number of contribution payers has increased from 1998 to 2001.

[23] From 1998 to 2001, the number of contribution-payers of health insurance for self-employed increased substantially from 287.000 to 395.000.

Simulated *housing subsidy contributions* (including employers and employees) are about 102% of the actual budgetary revenues.

Contributions to disability insurance (paid by employers and self-employed) are underestimated by approximately 4%.

The *employers' contributions to family benefit funds* (only paid by employers of non-civil servants) are underestimated by 12%.

EUROMOD simulates 83% of actual *income tax* revenues[24] (excluding withholding tax on investment income).

However, the results for *tax on investments* are very bad. The model simulates 6% of real revenues. We believe that there are several important reasons for this and are pessimistic as to the scope of distinctly improving this ratio in the short term as long as household survey data are used as the basis for modelling. On one hand, we suspect a serious under-reporting problem due to the fact that people may (a) not be aware of all incomes which would fall under investment income and are taxed as such; (b) be reluctant to give an indication of their financial wealth by revealing their investment income. The latter reason may be particularly relevant in Austria where there existed a long tradition of "anonymous" savings accounts.[25] We also suspect anonymity to be the cause for another major reason for the underestimation of investment tax revenues. By and large, investment taxes in Austria are deducted at source. Taxpayers (both Austrian and foreign) could only have investment income assessed together with other income if they officially registered their bank accounts under their name – thus foregoing any advantages of anonymity. Anonymous saving accounts were likely to have attracted major inflows of money from abroad – money which is, of course, not visible in any domestic household survey even if there was no under-reporting problem. Since anonymity has been largely outlawed in recent years, we would expect the actual revenues under this category to decline in the future (and, thus, the shortfall of simulated EUROMOD results to become smaller as well).

The validation of *employees' compulsory union contributions* and the *employer's contributions to bankruptcy fund* (only paid for those employees for whom employers are liable to pay

[24] In EUROMOD, redundancy pay („Abfertigung"), which is taxed with a special tax rate, is not taken into account when computing income taxes. (Redundancy pay is also not part of diposable income concept because only this concept is supposed to show only „regular" income).

[25] This tradition was only abolished in 2001 (two years after the collection of the survey-data underlying the simulation).

unemployment insurance contributions) are currently not possible, since we do not have access to appropriate reference statistics yet.

Concerning validation of benefits, the results are as follows:

The model results for *child benefit* ("Familienbeihilfe") are satisfactory: the over-estimation is a bit more than 3%.[26] This result, together with the number of recipients suggests that the number of children is close to reality in the EUROMOD data.

Concerning expenditure, the outcome of the *small children benefit* ("Kleinkindbeihilfe") matches also almost the real figures.[27] The underestimation of the number of recipients (1/11) cannot really be explained. Given the amount of benefit (ATS 1.000/month) and the total yearly expenditure (ATS 14 Mio.) than in reality people would get small children benefit only for an average of about one month (whereas according to the law, small children benefit is paid for a maximum of 12 months).

Newborn health-check bonus ("Mutter Kind Pass Bonus") is under-estimated by 10% in EUROMOD despite the fact, that in reality, people only receive this benefit if they do a post-maternity health-check for themselves and their child. In EUROMOD, we assume that everybody has this health check done. Obviously, this assumption is entirely accurate.

For *child bonus for non-civil servant pensioners* (“Kinderzuschuss” ASVG), EUROMOD over-estimates expenditure by large (28%). This benefit is tied to receipt of pension.

EUROMOD simulates 35% less expenditure on *family bonus* ("Familienzuschuss"), than paid in 2001. In reality, all provinces use different regimes for family bonus. However, we do not have a "province" variable in the underlying data (because of data protection issues). So the province has been imputed randomly (ensuring that the number of persons in each province matches external aggregates, but without trying to reproduce the correct distribution household characteristics). A further explanation for the difference could be that the reference statistics include also special benefits for single partents.

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[26] For reference figures on expenditure we have only data excl. federal and regional authorities (Gebietskörperschaften/Selbstträger).

[27] The overestimation of 14% compared to the reference statistics can be explained that the latter is rounded to Mio. Euro.

Expenditure on *minimum pension top-up for non-civil servants* (“Ausgleichszulage”) is over-estimated in EUROMOD by 31%, but the number of recipients is 58% more, than in reality. This may suggest, that in EUROMOD data there are more pensioners with pensions around the minimum pension level. [28].

For *social assistance* ("Sozialhilfe"), EUROMOD simulates about 2.4 times the reference value. This disappointing result is, we believe, mainly due to non-take-up issues. Conservative estimates speak of about 56% non-take-up (Dimmel 2000), but for the time being there are no comprehensive studies on non-take-up in Austria. The simulation of social assistance is especially difficult, because local authorities have broad discretion rights to determine the amount of social assistance (taking into consideration heating costs, rental costs, clothes, etc.). In addition, social assistance has to be paid back by the recipients once they achieve a "sufficient" level of income and even relatives, which are not members of the "benefit unit" can be held liable for social assistance paid out to their family members. These strict and often confusing rules make take-up a particularly important problem in Austria. In addition we suggest that many people who would only be entitled to very low amounts of social assistance do not 'bother' to apply. The poor results are also related to the province-specific nature of social assistance (see above family bonus) and the problematic point that there are complex rules with regard to eligibility of non-Austrians. We do not attempt to model these rules, but instead do not distinguish between Austrians and foreigners.

Given the very large over-estimation, further investigation is essential. This would include experimenting with eligibility based on receipt of the benefit in the data and clarifying the treatment of citizenship. However, it should be noted that the focus in EUROMOD on formal rules can also be a very valuable contribution to establishing the extent of non-take-up in Austria.

For *longterm maternity benefit Kärnten* ("Kärntner Kindergeld”) we underestimate the costs by about one third, but as reference statistics only estimates for 2001 are available.

Due to the fact, that in our data there is no civil servant pensioner eligible for *child bonus for civil servant pensioners* (“Kinderzulage”) or *minimum pension for civil servants* (“Ergänzungszulage”), we could not simulate those benefits.

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[28] There exists a serious data problem in the ECHP, as is not really identifiable what is pension and what is minimum pension top up.

For *maternity allowance supplement* ("Zuschuss zum Karenzgeld oder zur Teilzeitbeihilfe"), reference statistics are not available.

Table 10. Summary statistics of employment income 2001 in EUROMOD database*

	Males	Females	All
Mean	33,195	19,274	27,403
Median	29,771	17,487	24,892
Std. Deviation	20,888	12,952	19,279
Minimum	219	158	158
Maximum	199,352	71,026	199,352
Skewness			
Kurtosis			

* Updated values from 1998 to 2001

Table 11. Deciles values of gross employment income in EUROMOD database and reference statistics for 2001*

Decile points	EUROMOD - males	Reference - males	EUROMOD – females	Reference – females	EUROMOD – all	Reference - all
1st	9,079	4,267	3,606	2,092	5,996	2,837
2nd	18,328	12,115	7,714	5,408	11,185	7,955
3rd	23,304	20,355	11,000	9,532	15,977	13,450
4th	26,448	24,981	14,166	13,382	21,469	18,842
5th	29,771	28,601	17,487	17,042	24,892	23,488
6th	33,930	32,479	20,969	20,838	28,473	27,663
7th	38,578	37,433	24,226	24,944	33,377	32,292
8th	47,169	45,195	30,196	30,444	38,854	38,813
9th	58,819	60,291	36,888	39,565	51,241	51,435

* 1/12 of annual income. Incl. apprentices and minor wages. Euromod: updated values from 1998 to 2001.
Reference statistics: unstandardised incomes (adjusted to 1/12 of annual income).
Source reference statistics: Rechnungshof 2002.

Table 12. Net-household-income (ATS, annual divided by twelve) by number of children in household in EUROMOD database and reference statistics for 2001

	All households		0 children* in household		1 child in household		2 children in household		3 children in household	
	Reference '00	*Euromod '01*	*Reference '00*	*Euromod '01*	*Reference '00*	*Euromod '01*	*Reference '00*	*Euromod '01*	*Reference '00*	*Euromod '01*
Unequivalised										
N	3.241.000	3.238.520	2.123.000	2.195.260	533.000	471.417	436.000	432.773	149.000	139.070
Quartile Point 1	20.342	18.563	17.361	16.106	26.351	25.135	29.860	29.669	32.440	33.147
Median	31.809	29.054	27.314	23.926	37.382	36.124	37.978	36.738	43.150	40.847
Quartile Point 3	44.950	41.656	41.006	37.852	51.200	48.959	50.007	48.139	59.490	51.076
Mean	35.054	33.135	31.328	29.426	40.765	39.758	41.969	40.783	47.473	45.440
Equivalised ("modified" OECD: 1/0.5/0.3)										
N	3.241.000	3.238.520	2.123.000	2.195.260	533.000	471.417	436.000	432.773	149.000	139.070
Quartile Point 1	14.850	13.813	15.274	13.764	15.056	14.467	14.047	14.105	12.476	11.871
Median	19.585	18.637	20.858	18.637	19.448	18.778	16.983	16.705	15.824	15.367
Quartile Point 3	25.422	24.697	27.234	24.697	24.000	23.633	21.122	21.260	19.907	18.293
Mean	21.191	20.660	22.303	20.660	20.411	20.169	18.290	18.108	16.799	16.464

* Child definition according to child benefit: persons under 18 and pupils, students and apprentices

Source reference statistics: Statistik Austria, Household Budget Survey (“Konsumerhebung”) 1999/2000, http://www.statistik.at b.

Table 13. Pensioners' Gross income received by residents in Austria (ATS/year) in EUROMOD database and reference statistics 2001

	Reference '01	**EUROMOD '01**
All		
N	1.823.658	1.756.144
Quartile Point 1	118.462	121.680
Median	186.672	180.553
Quartile Point 3	293.837	285.685
Mean	227.499	234.884
Men		
N	800.104	779.022
Quartile Point 1	169.018	173.878
Median	256.602	243.795
Quartile Point 3	350.984	353.947
Mean	287.976	307.203
Women		
N	1.023.554	977.122
Quartile Point 1	102.459	117.191
Median	140.658	127.887
Quartile Point 3	224.018	206.371
Mean	180.219	177.226

Sources: EUROMOD
Reference statistics: Statistik Austria 2003b, 374: Income Tax Statistics (Lohnsteuerstatistik 2001 – Sozialstatistische Auswertungen). The gross income concept used is that defined in the income tax code (§25 EStG).

Table 14. Comparison of simulated taxes/contributions with external sources 2001

Taxes and contributions simulated (ATS million/year)	EUROMOD (a)	External source* (b)	Ratio (a)/(b)	EUROMOD N (1,000) (d)	External source N (e)	Ratio (d)/(e)
Unemployment insurance contributions	49,605	54,054 (1)	0.92	2,510	2,627	0.96
Pension insurance employees (excl. civil servants and voluntary contributions)	185,815	204,946 (1)	0.91	2,509	2,733	0.92
Pension insurance self-employed	13,471	16,488 (2)	0.82	286	465 (2)	0.62
Health insurance employees (excl. voluntary contributions)	117,223	104,100 (1)(3)	1.13	4,657	5,107 (3)	0.91
Health insurance self-employed	7,136	11,347 (4)	0.63	248	395 (4)	0.63
Housing subsidy contributions	8,578	8,446*	1.02	2,932	n.a.	
Employees' compulsory union contributions	3,159	n.a.		2,235	n.a.	
Contribution to disability (accident) insurance	14,122	14,730 (5)	0.96	3,508	4,453 (6)	0.79
Employers' contribution to family benefits fund	39,649	44,886	0.88	2,834	n.a.	
Employers' contribution to bankruptcy fund	5,710	n.a.		2,510	n.a.	
Income tax	223,301	270,508*	0.83	3,654	n.a.	
Tax on investments	1,679	28,181 (7)	0.06	937	n.a.	

(1) Employees and employers
(2) GSVG/FSVG+BSVG+NVG
(3) incl. unemployed and pensioners
(4) Self employed+tradesmen+farmers incl. compulsorily insured relatives
(5) Employers and self employed
(6) Employees and self employed; without students, pupils
(7) KESt+KESt on interests
* provisional figures
Sources: Hauptverband der österreichischen Sozialversicherungsträger 2002a, Hauptverband der österreichischen Sozialversicherungsträger 2002b, Kammer für Arbeiter und Angestellte 2002, Statistik Austria http://www.statistik.at

Table 15. Comparison of simulated benefits with external sources 2001

Benefits simulated (ATS million/year)	EUROMOD (a)	External source* (b)	Ratio (a)/(b)	EUROMOD N (1,000) (d)	External source N (e)	Ratio (d)/(e)
Child benefit	38,538	37,400 (1)	1.03	1,100	1,090 (2)	1.01
Small children benefit	16	14	1.14	1	11 (3)	0.09
Newborn health check bonus	86	96	0.90	43	n.a.	
Child bonus for pensioners (non-civil servants)	475	372	1.28	63	62 (4)	1.02
Child bonus for pensioners (civil servants)	0	n.a.		0	n.a.	
Maternity allowance supplement	146	n.a.		5	8 (3)	0.63
Family bonus	657	1,005 (6)	0.65	31	n.a.	
Minimum pension top-up (non-civil servants)	13,535	10,334	1.31	366	231 (5)	1.58
Minimum pension top-up (civil servants)	0	n.a.		0	n.a.	
Social assistance	5,816	2,472 (7)	2,35	120	94	1,28
Longterm maternity benefit Kärnten	328	460 (8)	1,32	5	15 (8)	0,33

(1) excl. federal and regional authorities (Gebietskörperschaften/Selbstträger)
(2) September 2001. Receivers incl. federal and regional authorities (Gebietskörperschaften/Selbstträger); Children incl. Selbstträger: 1,835
(3) September 2001.
(4) Bonuses December 2001.
(5) incl. widows, orphans.
(6) incl. assistance to single parents.
(7) General social assistance excl. Sickness-help (Krankenhilfe) and other benefits.
(8) Estimates for 2001.
* Sources: BMSG 2002, BMSG 2004, Hauptverband der österreichischen Sozialversicherungsträger 2002a, Hauptverband der österreichischen Sozialversicherungsträger 2002b, Kammer für Arbeiter und Angestellte 2001, Kammer für Arbeiter und Angestellte 2002, Statistik Austria 2003c

The number of civil servants in the EUROMOD database might also play an initial role in how simulated contributions fit to the real figures. To explain the differences in the number of civil servants between our database and the reality, we have to clarify what we mean under the term 'civil servant'. In the EUROMOD dataset we use the following definition of civil servants: all persons who were employed in the public sector in the year 1998 and all other persons (including students, inactive and pensioners population), who ever had been civil servants. This definition is necessary in order to simulate benefits and some contributions paid by for former civil servants. Table 16 shows the distribution of civil servants in the EUROMOD database according to employment status. We can see that approximately 470,000 persons are employed as civil servants; the remaining almost 10,000 people belong to other employment statuses. The number of currently employed civil servants seems to be too high in comparison to the official statistics, where the reference figure is 363,597 (Hauptverband der österreichischen Sozialversicherungsträger 1999, 22). This over-estimation of the number of civil servants means that we underestimate non-civil servant employees, and as a result we might over- or underestimate contributions where civil- and non-civil servants pay according to different rules.

Table 16. Distribution of civil servants in EUROMOD database according to employment status 1998

	Non-civil servant	Civil servant	Total
Pre-school	556,947	0	556,947
Farmer	162,612	0	162,612
Employer or self-employed	206,629	0	206,629
Employee	2,636,433	467,729	3,104,162
Pensioner	1,674,133	4,516	1,678,649
Unemployed	127,671	0	127,671
Student, Pupil	1,258,846	1,917	1,260,763
Inactive	672,916	3,055	675,971
Sick/Disable	14,994	0	14,994
Other	151,183	419	151,602
Total	7,462,364	477,636	7,940,000

4.2 Income distribution and poverty estimates

Although it would be desirable to compare EUROMOD results to a database different from the one that is used as an input into the model, the comparison to other calculations based on ECHP does have some value because we *simulate* a significant part of disposable income.

The decile values are quite close in the two estimates (EUROMOD for 2001, ECHP for 2000). However, the poverty line and poverty rate (60% of median) is lower in EUROMOD. This could also partly be a result of the significant over-estimation of social assistance expenditures in EUROMOD, although social assistance composes only an insignificant part of disposable income in Austria (Förster et al. 2001). As a result, incomes of households receiving social assistance will often still remain below the poverty line. The lower poverty deficit in EUROMOD can also partly be explained by the overestimation of social assistance.

Table 17. Income distribution and poverty comparisons 2001

	EUROMOD[29]	ECHP (2000)[30]
Overall population		
Gini-coefficients of EDI	0.23	
"Poor" population[31]		
Gini-coefficients of EDI	0.09	
Overall population		
Decile points (equ. ATS/month; 1/12)		
1st	10,914	10,602
2nd	13,286	
3rd	14,975	
4th	16,647	
5th	18,260	18,549
6th	20,042	
7th	22,494	
8th	25,367	
9th	30,712	30,814
Overall population		
Poverty line (60% of the median)	10,956	11,130
Below 60% of median	10.2%	12%
Poverty deficit[32] (bn ATS/year)	13,60	18,56
Poverty line (50% of the median)	9,130	
Below 50% of median	4.0%	
Poverty line (70% of the median)	12,782	
Below 70% of median	17.8%	

Source ECHP: ICCR 2002

[29] EUROMOD simulations are based on 1998 income data from ECHP, updated to 2001. Household disposable income is equivalised using modified OECD scale (1-0.5-0.3). Poverty rates refer to individuals.

[30] The estimates are based on ECHP data, containing income data from 2000 (7th and last Austrian wave 2001). The disposable income is equivalised by modified OECD scale, as well.

[31] "Poor" households have per-capita household disposable income below 60% of the median.

[32] Poverty deficit is the mean difference of disposable income of poor from the poverty line multiplied with persons concerned.

Breakdowns of poverty headcounts by age and gender show also that all in all the poverty rates in EUROMOD are under-estimated.

Table 18. Poverty headcounts by age and gender 2001

	EUROMOD[33]		ECHP (2000)[34]	
	Men	Women	Men	Women
Age 0-19				
Below 50% of median	3.9%	4.4%	6%	8%
Below 60% of median	8.7%	12.1%	12%	14%
Below 70% of median	20.6%	20.3%	22%	25%
Age 20-59				
Below 50% of median	3.7%	3.5%	5%	5%
Below 60% of median	6.5%	8.2%	8%	9%
Below 70% of median	11.8%	15.0%	13%	17%
Age 60+				
Below 50% of median	4.4%	5.1%	7%	9%
Below 60% of median	13.7%	21.0%	13%	21%
Below 70% of median	21.9%	30.0%	22%	32%

Source ECHP: ICCR 2002

[33] EUROMOD simulations are based on 1998 income data from ECHP, updated to 2001. Household disposable income is equivalised using modified OECD scale (1-0.5-0.3). Poverty rates refer to individuals.

[34] The estimates are based on ECHP data, containing income data from 2000 (7th and last Austrian wave 2001). The disposable income is equivalised by modified OECD scale, as well.

References

BMSG (Bundesministerium für Soziale Sicherheit und Generationen), *Bericht über die soziale Lage 2001-2002*, Wien 2002.

BMSG (Bundesministerium für Soziale Sicherheit und Generationen), *Sozialausgaben*, www.bmsg.gv.at, 2004.

Dimmel N., *Normgeltungsvermutungen und gradualisierte Rechtsanwendung*, Working Papers in Legal Theory, Political Philosophy, and Applied Ethics No. 20, Vienna 2000.

Guger, A., *Redistribution by the State in Austria*. Paper presented to the European Economic Association Conference, Toulouse 1997.

Hauptverband der österreichischen Sozialversicherungsträger: *Handbuch der österreichischen Sozialversicherung 1999*, Vienna 1999.

Hauptverband der österreichischen Sozialversicherungsträger, *Handbuch der österreichischen Sozialversicherung 2002*, Vienna 2002a.

Hauptverband der österreichischen Sozialversicherungsträger, *Statistisches Handbuch der österreichischen Sozialversicherung2002, Vienna 2002b.*

ICCR, Zur sozialen Lage der Haushalte in Österreich 2000. Europäisches Haushaltspanel, Tabellenband – 7. Welle, Wien 2002.

Kammer für Arbeiter und Angestellte, *Sozialstaat Österreich. Sozialleistungen im Überblick*, Vienna 2001.

Kammer für Arbeiter und Angestellte, *Wirtschafts- und sozialstatistisches Taschenbuch 2002*, Vienna 2002.

OECD, *Social Expenditure Database 1980-1998*, Paris 2001.

Rechnungshof, *Bericht gemäß Art. 1 § 8 Bezügebegrenzungsgesetz BGBl. I Nr. 64/1997 für die Jahre 2000 und 2001*, Vienna 2002.

Statistik Austria, *Statistical Yearbook 2003*, Vienna 2002.

Statistik Austria, *Statistical Yearbook 2004*, Vienna 2003a.

Statistik Austria, *Statistical News 5/2003*, Vienna 2003b.

Statistik Austria, *Statistical News 10/2003*, Vienna 2003c.

Statistik Austria, Volkswirtschaft. Steuereinnahmen/Steuern, http://www.statistik.at.

Till M., Tentschert U., *Europäisches Haushaltspanel – Endbericht 4. Welle*, Vienna: ICCR 2000.