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# BAND 1

## **Redistribution in the welfare state**

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# REDISTRIBUTION IN THE WELFARE STATE

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## EXECUTIVE SUMMARY

### REDISTRIBUTION EFFECTS OF PUBLIC SPENDING AND THE SOCIAL INSURANCE INSTITUTIONS IN AUSTRIA

The increasing inequality in the distribution of market incomes in recent decades has made distribution issues topical again, both in economic analyses and in the discourse on economic policy. The consequences of the current severe economic crisis will further enliven the discussion: on the one hand, the crisis affects different sectors of the population to varying extents, and on the other hand it will again raise questions about the redistribution effects of taxes when it comes to financing the follow-up costs of combating the crisis. This study examines the direct redistributive effects of the activities of the public sector on the 'welfare' of private households in the years 2000 and 2005. It follows up the previous studies by the Austrian Institute for Economic Research (WIFO) on this theme (Guger, 1987, 1996a) in as comparable a form as possible.

### HIGH LEVEL OF POTENTIAL REDISTRIBUTION DUE TO THE HIGH PROPORTION OF STATE EXPENDITURE IN RELATION TO GDP

With a tax and contributions rate of over 42% (2007) and public spending at 48½% of GDP, Austria could potentially have a relatively high level of redistribution. However, the redistribution effects are very limited on the public revenue side: due to a high proportion of indirect taxes and social contributions with a ceiling on insurable earnings, a very low level of taxes on assets and below-average taxation of income, the overall effects of taxes and contributions are hardly progressive at all. The public spending side, on the other hand, has a clearly progressive effect, although (given full integration of the respective individual into employment) relatively generous monetary transfer payments for old-age pensions and family policy measures dominate and

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welfare or minimum income elements as well as social services (support infrastructure) are weakly developed.

## AN INCREASING TAX AND CONTRIBUTIONS BURDEN ON LABOUR AND A SIMULTANEOUSLY FALLING WAGE RATIO

Since the second half of the seventies, the distribution of national income has shifted markedly away from labour. Since 1978, when it reached its highest level, the wage ratio – wage income as a proportion of national income – fell until the start of this decade by almost six percentage points, and since then has fallen again by five percentage points to around 67% in 2008. In a parallel development to this change in functional distribution, the tax and contributions burden on the factors of production has shifted towards labour. According to the available data, taxes and contributions on wage incomes are not only clearly higher than those on income from profits and assets (including property), but have also risen more strongly: the effective wage tax burden, the proportion of wage taxes on taxable income – wages, salaries and pensions – rose from 10.9% in 1990 to 15.4% in 2007, whereas the revenue from income and capital gains tax in relation to the corresponding tax base fell slightly (1990 10.9%, 2007 10.3%). The net wage ratio, the wage ratio after the deduction of wage taxes and social insurance contributions as a proportion of net national income, was six percentage points lower than the gross wage ratio in 1988 at just under 67%. Since then, this gap has grown to eight percentage points. The weak rise in wages and the increasing proportion of wages in the financing of the public sector have subdued the development of net real incomes and consequently dampened consumer demand.

## INCREASING INEQUALITY OF MARKET INCOMES

For reasons of comparability with the results of previous studies and due to the lack of data, this analysis is limited to wage and transfer incomes. Incomes from self-

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employment and from assets were not taken into account. The distribution of workers' primary or gross market incomes has become more unequal in the last 1½ decades, while employment levels have risen markedly.

At an individual level, the dispersion of gross wages and salaries increased significantly, particularly in the nineties. In dependent employee households, the distribution of gross wage or market incomes changed less than at an individual level. If the households of transfer payment recipients (pensioners, the unemployed etc.) are included, the distribution of household incomes has remained almost unchanged since the start of the nineties.

The increasing inequality in the distribution of market incomes is primarily due to economic trends and structural reasons which work in the same direction: at an individual level, part-time and atypical forms employment have increased significantly, and technical progress and globalisation have put pressure on the wages of workers with low qualifications, while at the same time these factors have tended to favour highly-qualified employees. At household level, this tends to be balanced in low income groups by both additional income from part-time employment and the greater weight of pensioners with long insurance periods and consequently higher pensions.

#### ACTIVITIES OF THE STATE – PUBLIC SECTOR SPENDING AND SOCIAL INSURANCE INSTITUTIONS SIGNIFICANTLY REDUCE THE INEQUALITY OF MARKET INCOMES

The activities of the state have a considerable corrective effect on the distribution of gross or primary incomes. Secondary distribution, the distribution of incomes after all taxes/contributions and public services have been taken into account, is markedly more even than the distribution of primary or market incomes. A realistic evaluation of the income distribution and the redistribution effects of the public sector has to take household sizes and the age structure of household members into account.

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The number of household members increases along with income levels: on average for non self-employed households it amounts to 2.2 persons per household (2005) and rises continuously from 1.5 persons in the bottom quarter to 3 persons in the top quarter. This analysis is therefore mainly based on the weighted pro-capita income (equivalent income) of households.

If non self-employed households – in other words the households of employees, pensioners, the unemployed, persons on parental leave and students etc. – are analysed on the basis of equivalent gross market incomes, the average market or primary income in 2005 was € 2,130 per month and the average secondary income – after redistribution due to taxes and contributions and state benefits – was around € 1,930 (Overview I). Those in the lower half of distribution profit due to the redistribution process, while the upper half lose out: the bottom decile – the 10% of households with the lowest market incomes – receives € 385 per capita weighted gross market income (equivalent income), and afterwards has a secondary income which is over 190% higher at around € 1,130 per capita. In the 5th decile, tax and contributions payments and the monetary and real public transfers received almost balance each other out; both the primary and the secondary income are over €1,700. In the top decile, on the other hand, the transfers received are almost € 1,700 per month or around 30% of market income lower than tax and contributions payments.

An analysis of the distribution of equivalent primary and secondary disposable incomes according to tertiles reveals that in 2005 the lower third – with 14% of market incomes and 23% of secondary incomes – gains 9 percentage points due to the redistribution process. The middle third also gains around 1¼ percentage points while rising from 29.1% to 30.4%, and the upper third loses almost 10 percentage points and falls from 56.9% to 46.6% (Overview ii). The most common benchmark for inequality, the Gini coefficient, which is 0.335 for the primary incomes of non self-employed households, is reduced by 45% to 0.185 by the expenditure of the public sector. According to this

benchmark, inequality in the year 2000 was approximately the same as in 2005, but greater than in 1991, the base year of the last comparable study.

Based on the taxes and contributions and state expenditure used in this analysis, 40% of non self-employed households are net beneficiaries of the state redistribution process; they receive more in terms of public services than they pay in taxes and contributions.

**Overview I: from equivalent primary distribution to equivalent secondary distribution: weighted per-capita incomes of non self-employed households in 2005**

Gross equivalent market incomes	Equivalent primary distribution (gross equivalent market incomes)		Total equivalent taxes and contributions	Equivalent monetary and real transfers	Equivalent secondary distribution
	Borders	Average	Average in € per month	Average	Average
1st Decile	793	385	205	947	1,127
5th Decile	2	1,712	584	576	1,704
10. Decile	more than 3,702	5,393	2,085	400	3,709
1st Tercile	1,416	895	315	749	1,330
2nd Tercile	2,338	1,856	641	544	1,759
3rd Tercile	more than 2,338	3,635	1,371	428	2,692
Total		2,129	776	574	1,927

Source: EU-SILC 2006, Consumer Survey 2004/2005, WIFO calculations. Equivalent corresponds to weighted per capita values

Overview II: Distribution of the equivalent primary and secondary distribution of non self-employed households 2005

	Equivalent primary distribution (gross equivalent market incomes)	Equivalent taxes and contributions total		Equivalent monetary and real transfers		Equivalent secondary distribution	
	Proportions in %	Proportions in %	In proportion to income in %	Proportions in %	In proportion to income in %	Proportions in %	In proportion to income in %
Gross equivalent market incomes							
1st Decile	1.8	2.7	53.5	16.6	246.0	5.9	292.7
5th Decile	8.0	7.5	34.1	10.0	33.6	8.8	99.5
10. Decile	25.3	26.9	38.7	7.0	7.4	19.2	68.8
1st Tercile	14.0	13.5	35.2	43.5	83.7	23.0	148.5
2nd Tercile	29.1	27.5	34.5	31.6	29.3	30.4	94.8
3rd Tercile	56.9	58.9	37.7	24.9	11.8	46.6	74.1
Total	100.0	100.0	36.4	100.0	26.9	100.0	90.5
Gini coefficient	0.335	0.354		-0.144		0.185	

Source: EU-SILC 2006, Consumer Survey 2004/2005, WIFO calculations. Equivalent corresponds to weighted per capita values.

THE OVERALL EFFECT OF TAXES AND CONTRIBUTIONS IS HARDLY PROGRESSIVE AT ALL

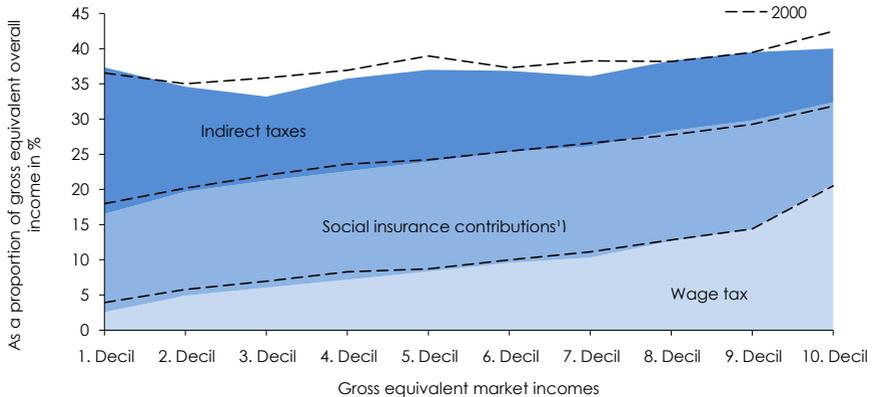
Taxes and contributions in Austria have hardly any redistributive effect. The progressive effect of income tax is largely counteracted by the regressive effect of social insurance contributions and indirect taxes on goods and services.

The redistributive effect of public revenue has weakened further in the last one and a half decades – in relation to incomes, the burden from indirect taxes has increased significantly for low income recipients.

In relation to market incomes, indirect taxes have a regressive effect which is stronger than at the start of the nineties. In low income groups, the burden imposed by indirect taxes has increased considerably, as the income from employment of these groups has fallen due to the increase in part-time employment and unemployment. As a

consequence, transfer incomes – particularly unemployment benefit and child care benefit – now account for a significantly larger proportion of income.

Figure I: Taxes and contributions in relation to the gross equivalent overall income of employee’s households, 2000 and 2005



Source: EU-SILC 2006, Consumer Survey 1999/2000, Consumer Survey 2004/2005, WIFO calculations. Equivalent corresponds to weighted per capita values. 1) Employees contributions

In order to take into account the increasing significance of public transfers in the estimation of distributive effects – particularly of indirect taxes – the rate of progression of the entire tax and contributions system is evaluated here on the basis of the gross overall incomes (including cash transfers) of employee households<sup>1</sup> (Figure I):

In relation to gross equivalent overall incomes, this results in an average tax and contributions rate of 37.6% for 2005. It amounts to 37.3% in the first decile, but then falls to the lowest value of 33.2% in the third decile and rises to 40% in the top decile. On

1 For methodological reasons, non self-employed households cannot be used in this study to evaluate the distributive effect of taxes and contributions, as pensions are treated as market incomes from which no pension and unemployment contributions are paid. International comparative studies treat pensions as transfers. Depending on the amount of pensions, this would result in much greater redistribution effects.

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the basis of overall income, this results in a slightly progressive redistributive effect of the tax and contributions system.

Although the tax burden on lower incomes has been noticeably reduced in the past decades as a result of income tax reforms, the overall tax and contributions burden for lower income groups has risen due to the increasing weight of indirect taxes. As already over 40% of earners pay no income tax, any efforts to relieve the burden on lower incomes and to strengthen the principle of taxation according to the ability to pay will necessitate a reform of the financing of the welfare state. It is also becoming clear, however, that an undifferentiated increase of value added tax would represent a disproportionate burden for lower income groups.

#### REDISTRIBUTION FROM HIGH TO LOW INCOMES TAKES PLACE VIA PUBLIC SECTOR EXPENDITURE

Vertical redistribution from high to low incomes occurs above all via public sector expenditure. The overall tax and contributions system burdens different types of income in very different ways, but it only has a moderately progressive effect. In relation to income, tax and contributions payments according to income groups are relatively uniform.

The Austrian social security system is dominated by universal benefits to which everyone is entitled without means-testing. Means- or income-tested benefits are limited to social assistance and unemployment assistance as well as to regional real and monetary benefits and services (infant allowance, family subsidies, nursery schools and nursing homes). The social insurance system is organised according to the insurance principle, so that benefits are primarily dependent on contributions and thus on previous earnings. The element of solidarity is limited and minimum levels of social security are not particularly well developed – nevertheless, public sector spending has strong vertical redistributive effects.

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Taking the number of household members and their age structure into account, the lower third of non self-employed households, which earn 14% of equivalent market incomes, receive 43.5% of all transfer payments. The middle third – which account for a proportion of over 29% of market incomes – are the addressees of around 31½% of public sector spending, while the upper third with almost 57% of market incomes receive around a quarter of benefits (Overview II). The negative Gini coefficient for public spending of -0.144 also signalises clearly that lower income groups benefit at an over-average rate from state expenditure.

The significance of public spending has increased markedly in the last 15 years, particularly in the 1st decile, in which the unemployed and other recipients of transfer payments are very well represented. In 2005, transfer payments totalled 2½ times the amount of market incomes, while in 2000 they had amounted to 1½ times market incomes and at the start of the nineties only around 80%. The main reasons for this lie on the one hand in employment market trends – in an increase of unemployment and in falling market incomes due to the considerable expansion of part-time employment and atypical employment relationships. On the other hand there have also been noticeable extensions of family policy benefits – particularly child care benefit.

The amount of monetary and real<sup>2</sup> state transfers received by households is closely linked to the number of household members. As household sizes increase along with income levels, the amount of public benefits received per household rises regardless of household size.

If the number of persons and their age structure are taken into consideration in the form of equivalent and/or weighted per-capita incomes in order to offer a realistic picture of the wealth situation of households, the absolute amount of public benefits

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2 Education and health benefits, childcare facilities etc.

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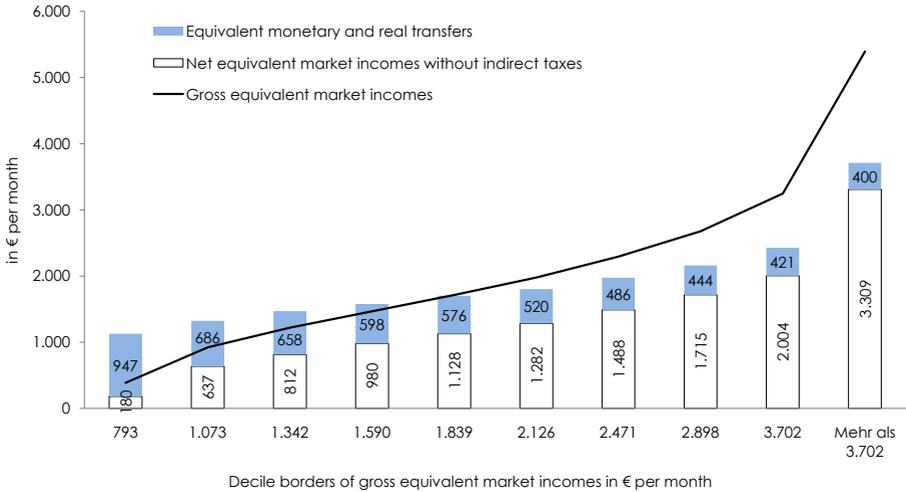
and services per household falls with rising incomes. On average in 2005, the weighted per capita monthly public expenditure analysed here was € 570<sup>3</sup>. The monetary and real transfers in the 1<sup>st</sup> decile were by far the highest at € 947, in the 5<sup>th</sup> decile they were average (€ 576) and in the uppermost decile they amounted to € 400 (Figure II).

The varying economic significance of public benefits and services according to income groups becomes particularly clear in relation to market incomes: in the first third, monetary and real transfers amount to 84% of market incomes, in the second third they come to just under 30% and in the upper third to 12% (Overview II). The most progressive public spending is that which is related to unemployment, social assistance and housing benefit; almost 90% of this expenditure is received by the 1<sup>st</sup> tercile in the income hierarchy. The lowest income groups gain from these benefits to an over-average extent, regardless of whether household size is taken into account or not (Overview III).

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<sup>3</sup> This is equivalent to € 970 per household.

Figure II: Equivalent incomes and equivalent monetary and real transfers according to the gross equivalent market incomes of non self-employed households, 2005



Source: EU-SILC 2006, Consumer Survey 2004/2005, WIFO calculations. Equivalent corresponds to weighted per capita values.

Overview III: Distribution of equivalent monetary and real transfers according to the gross equivalent market incomes of non self-employed households, 2005

	Equivalents											
	Health benefits and long-term care benefit		Education benefits		Family benefits		Unemployment benefit, Unemployment assistance, Social assistance		Housing benefits		Surviving dependants benefits	
Gross equivalent market incomes	In € per month	Proportions in %	In € per month	Proportions in %	In € per month	Proportions in %	In € per month	Proportions in %	In € per month	Proportions in %	In € per month	Proportions in %
1st Decile	300	9.4	176	14.5	112	14.5	301	71.2	17	47.3	39	51.2
5th Decile	316	9.9	149	12.2	94	12.1	7	1.7	1	3.4	8	10.2
10. Decile	298	9.3	63	5.1	34	4.4	1	0.3	0	0.5	3	4.5
1st Tercile	355	37.0	148	40.4	108	46.7	112	88.3	9	88.2	14	63.5
2nd Tercile	311	32.4	135	36.7	80	34.4	11	8.8	1	9.2	5	23.5
3rd Tercile	293	30.5	84	22.9	44	18.8	4	2.9	0	2.6	3	13.0
Total	320	100.0	122	100.0	77	100.0	42	100.0	4	100.0	8	100.0
Gini coefficient		-0.045		-0.135		-0.193		-0.723		-0.671		-0.442

Source: EU-SILC 2006, WIFO calculations. Equivalent corresponds to weighted per capita values.

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If household sizes are taken into account, almost half of family benefits are also received by the lower income tercile. Particularly those benefits which are paid out around the time of a child's birth, during its first years, and for families with several children tend to be received by lower income groups. Although the principle of horizontal distribution dominates Austrian family policy, family benefits also have a considerable vertical redistributive effect. For non self-employed households they amount to only 3.6% of market incomes on average. For relevant households with children, however, they amount to 13.8% and even 85% in the first decile, over a third of market incomes in the 1st tercile and 5.7% in the upper tercile.

Support for families in Austria is primarily based on cash benefits, and in this way they reach their goals in a horizontal respect. However, there are problems regarding the support infrastructure provided and thus in the promotion of the compatibility of work and family life as well as with regard to the risk of poverty of lone parents and families with several children.

Nevertheless, the largest areas of spending are health and education. Whereas family benefits (13.5%), benefits from unemployment insurance and social assistance (around 7.5%) amount to only just over a fifth of the monetary and real transfers analysed here, health accounts for over half and education for a fifth of public spending.

Health benefits (including long-term care benefit) are closely linked to age and are therefore disproportionately represented in the lower third of distribution – with the majority of pensioners – at 37%; the middle third accounts for over 32% and the upper third 30½%. On average, health expenditure amounts to 15% of market incomes: in the lower third just under 40%, in the middle third just under 17% and in the upper third just over 8%.

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The distribution effects of the state education system are primarily dependent on the number of children in a household, how long they attend school, and the type of school they attend. Like schoolchildren and students, education spending is thus distributed across households according to income groups. Over 75% of education spending flows into the lower two income terciles, while the upper tercile accounts for 23%. Education expenditure amounts to just under 6% of market incomes for all households. However, if it is related only to the respective households affected, expenditure on schools for households with schoolchildren amounts to 24% of their market income, and the expenditure on universities and other higher education institutions for households with students amounts to over 20%, but with a highly progressive effect: in the lower third of households with schoolchildren or students, state school expenditure amounts to over half of market incomes; in the upper third it is around 12%. Wealthy households could thus be reasonably expected to finance the education and training costs of their children. However, this would hardly be affordable in the lower income deciles.

The redistributive effects of housing subsidies are less clear: the mechanisms with which persons are supported, housing benefit and rent benefit, belong to the most progressive measures available: around 95% of funding is received by the lower half of distribution. Housing subsidies, which essentially include loans for subsidised housing and grants or subsidised interest rates for persons who need to raise a mortgage for building/renovating a house or flat, account for 90% of funding and tend to have a regressive effect. Housing subsidies are only able to benefit lower incomes indirectly by increasing the number of houses and flats on the market and thus reducing rents.

## CONCLUSION

Whereas taxes and contributions have a proportional effect overall and impose a relatively equal burden on all income groups in relation to their market incomes, public spending has a highly progressive effect: it benefits needier income groups to a larger

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extent than the wealthy, and its economic significance for lower incomes is much greater.

The public expenditure analysed in this study has a clearly progressive overall effect on income distribution, and the rate of progression of monetary and real transfers has increased in the past fifteen years.

If the number of household members is taken into account alongside incomes, the lower third of non self-employed households received 43½% of all public transfers in 2005, the middle third received 31½% and the upper third 25%. In relation to the gross incomes earned in the market, the state benefits and services provided in the lower third (without pensions, which are considered market incomes here) amount to 84%, in the middle third 29% and in the upper third 12%. On average in 2005, the state expenditure analysed here represented 27% of gross equivalent market incomes.

The principles of horizontal distribution and universal welfare state benefits are dominant in Austria. A major part of public funding is distributed more or less according to the number of persons in the individual income groups and independently of need: from the healthy to the sick and from the childless to households with several children (family and education policy).

In spite of this, welfare state benefits and services in Austria have a stronger redistributive effect than those of the selective, strictly means-tested Anglo-American style welfare systems. If the wealthy are excluded from the welfare system and social benefits and services are solely focused on the needy, the welfare state is soon faced by financial limitations and benefits for the poor become poorly-financed handouts. Reductions in state benefits and services therefore usually have a disproportionately strong effect on households with low incomes, whereas for sectors of the population with high incomes they can be substituted via the market without creating a significant additional burden.