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Introduction ${ }^{1}$

This paper looks at disposable household income in the year 2003 (Statistics on Income and Living Conditions - SILC 2004) and its evolution over time. The most recent SILC-Data is more comprehensive in terms of income sources than earlier household surveys in that income from self-employment, capital income and capital transfers between households are included.

This paper puts emphasis on the earnings development at the lower end of the earnings distribution and its development over time. The main objective is, to provide more insight into the mechanism of impoverishment and marginalisation of various groups of people as well as the dynamics.

The data source of SILC is an annual household survey, which was initiated in 2003 (SILC 2004) ${ }^{2}$. A random representative sample of 4,500 households (or some 11,000 persons) has been drawn from the central population register. The data are integrating panel and crosssection information, whereby every year one quarter of the sample is substituted for a new one (rotating sample). Thus, in 2004 (SILC 2005), when the second survey has been undertaken, three quarter of the sample of the previous year were complemented by an additional new sample, i.e., the remaining $25 \%$.

In order to capture the development of the income distribution of households over time, recourse is taken to micro census data, i.e., a $1 \%$ sample of households. Surveys including questions on income have been undertaken in 1999, 1993 and 1983. Note should be taken that micro-census data does not provide a comprehensive picture of household earnings since self-employed and family helpers are not included. ${ }^{3}$ The data source is, however, the only one which links information on income from the early 1980s to the end of the 1990s; if one aims at a more comprehensive insight into household income at a point in time, one has

[^0]to consult the household budget survey (Konsumerhebung) of 1999/2000 and 2004/054. The latter does not only include income from dependent employment and transfer payments, but also from self-employment and property/capital/wealth (Vermögenseinkommen) and household expenditures. The household budget survey has been analysed in detail by Statistics Austria (Bauer - Reiselhuber, 2001, Baver - Klotz, 2002; Statistics Austria, 2006B). The ex ante expectation of the exclusion of income from self-employment in the micro census is a flattening of the income distribution as income of the latter group tends to be more polarised than wage and salary income including transfer payments. The results of the income and expenditure survey do not corroborate the ex ante expectation, however. The income disparities between households are not significantly higher in the case of total household disposable income compared to earnings resulting from wages, salaries and transfers in 1999/2000. Income data from the SILC-survey (2003) is linked with household expenditure and disposable income of the most recent household budget survey. Thus there is a break in survey data with SILC, which cannot be corrected for as there are no parallel two types of surveys.

The paper looks at overall trends in the earnings distribution, provides some insight into the composition of earnings in 1999 and 2003, and tries to highlight some of the driving forces for change over time. The methodology employed follows the guidelines of the OECD as documented in the methodological annex.

The income concept used is that of equivalent disposable income per individual (monthly average in Euro at 1983 prices; for the period before 2000 the ECU is taken as exchange rate for the Austrian Schilling) ${ }^{5}$. The calculation of household incomes is based on individuals, whose income is added up to obtain disposable household income. The latter is adjusted for differences in household size by dividing disposable household income by the square-root of the number of persons in the household. Then, equivalent household income is attributed equally to all members of the household (adults and children are treated equally). The equivalence scale elasticity of 0.5 implies economies of scale in consumption within a household consisting of more than one person' ${ }^{6}$. 1983 and 1993 are years of the same cyclical position, i.e., at the end of a recession, while 1999 is a year well into a strong economic

[^1]upswing. 2003 was a year at the trough of the business cycle, i.e., a similar cyclical position as in 1983 and 1993.

It should also be noted that the household survey of 1993 is not adequately capturing the change in the structure of population between 1989 and 1993. This period is characterised by unprecedented numbers of net-inflows of migrants. A large number of migrants were refugees from the former region of Yugoslavia who settled in Austria. The migrants tend to fill the ranks of inhabitants at the bottom end of the income scale. A new sample was drawn in 1994, taking account of the changed structure of the population. By 1999, the migrants have been more or less fully integrated, many of them have become naturalised. Both aspects, the difference in the cyclical position and the structural adjustment of the sample survey may account for some of the rise in income inequality between 1993 and 1999. Between 1999 and 2003, the income inequality has continued to increase, albeit to a relatively small extent.

## Main trends in the distribution of household income

The measures of economic inequality fall broadly into two categories: objective measures of inequality, usually some statistical measure of relative variation of income, e.g., variance, coefficient of variation, the Gini coefficient of the Lorenz curve; and some normative notion of social welfare according to which a higher degree of inequality represents a lower level of social welfare. The calculation of objective inequality indicators is usually the first step of analysis, which may be followed by debates over ethical values and the question of the degree of inequality a society tolerates, or at what stage inequality jeopardises economic growth or social peace.

This paper aims at establishing an objective picture of income inequality in Austria as indicated by the database. Perhaps the simplest measure of inequality is a comparison of the two extreme values of income, i.e., the ratio of the mean income of the bottom and top decile (P90/P10). Accordingly, the ratio of the mean income of the $90 \%$ up from the bottom to the income of the $10 \%$ up from the bottom was 3.3 in 1999 and 3.2 in 2003. While according to this measure income inequality has remained fairly stable between 1999 and 2003, it has clearly and continuously increased from the early 1980s (1983: 2.9, 1993: 3). The most recent ratio corresponds to countries like France, Switzerland, Belgium and Japan; it is higher than in the Nordic countries and Netherlands (which range between 2.6 and 3) and clearly below Greece (4.8), Italy (4.6), UK (4.2) and Germany (3.6). Another indicator used to identify the degree of inequality of income is thee share of after-tax income which goes to the top $1 \%$ of the population. In Austria $3.8 \%$ of the after-tax income went to the top $1 \%$ of the population. This is clearly less than in countries like Australia and the USA. In Australia, the

[^2]income share of the top 1 percent rose from under 5 percent in 1980 to 9 percent in 2002. (Atkinson - Leigh, 2006) In contrast, in USA the share rose from $7.5 \%$ in 1979 to $13.6 \%$ in 1997. (Shapiro et al, 2001). The Austrian income share of the top $1 \%$ of the population is amongst the lowest in the developed world, comparable to The Netherlands and Sweden (in 2004 only if excluding capital gains), (Roine - Waldenström, 2006).

The difficulty with looking at the top income shares or the range is that one learns little about the distribution over the rest of the population. The range, for example, ignores the distribution between the extremes. In theory two distinctly different distributions may lie between the extremes, e.g., a polarised division of the population into rich and poor, or, alternatively, a clustering around the mean income. The implications for economic and social policy are quite different in the one or the other case. Therefore, it is necessary to take recourse to a measure of relative mean deviations, i.e., to compare the income level of each with the mean income; in addition one wants to capture the impact of a transfer of income between income levels on inequality by calculating the variance. The variance depends, however, on the mean income level. In order to give equal weight to transfers of income, independent of the income level, one has to calculate the coefficient of variation. In order to ensure the Pigou-Dalton condition (Pigou, 1912, p.351, Dalton, 1920, p. 12), i.e., to make the inequality measure sensitive to transfers from the rich to the poor, the coefficient of variation is squared (SCV = Squared coefficient of variation). The SCV index is the sum of the squared deviations of income of each individual from that of the population mean, divided by the square of mean income. The SCV index is sensitive to changes at the top end of the income scale.

If one wishes to attach greater importance to income transfers at the lower end of the income distribution, one has to transform income data, e.g., by taking the logarithms. The MLD (mean log deviation) index is such an indicator. It is the average of the log ratios of the income of each individual to the mean income. The MLD has the property of highlighting differences at the lower end of the income scale and somehow squashes changes in the upper income ranges.

The SCV and MLD have the same lower bound value of zero, i.e., in the case of perfect equality, but different upper bound values. It is infinity for the SCV and [1+log(100)]log(mean income) for the MLD. In Austria, the value of the SCV index has continuously increased between 1983 and 2003, suggesting a widening of inequality of disposable household income over time. It rose in the decade after 1983 by 1.4 points (from a level of 19.9 in 1983 to 21.3 in 1993) and in the following decade by 8.8 points, whereby the rise was concentrated upon the early years of 2000 (to 22.5 in 1999 and 30.1 in 2003) ${ }^{8}$. The value of the MLD, in contrast, has had a different development over time: it declined between 1983 and 1993 slightly (from 10.3 in 1983 to 10.1 1993), while it increased thereafter significantly (to 131999 and 13.3 2003). This suggests that the deviation of income from the mean has diminished at

[^3]the lower end in the 1980s and increased significantly in the 1990s and early years of 2000, while it has increased all along at the upper end of the income scale. The income spectrum widened at the lower end of the income scale above all in the 1990s, while it expanded at the upper end above all in the early years of 2000.

With an SCV index level of 30.1 in 2003 (22.5 in 1999), Austria's degree of inequality is similar to the Netherlands (30.8 in 2000) and lower than in Sweden (45.4 in 2000). (International comparative data from Förster - Mira d'Ercole, 2005). It is significantly lower than on average in the OECD (OECD 25: 51.9 in 2000).

Also the MLD index level of 13.3 in 2003 (after 13 in 1999 and 10.1 in 1993) is at the lower end of income inequality. Lower values can only be found in the Netherlands (11.7 in 2000) and Sweden (10.6 in 2000). Norway, Switzerland and France have similar levels, while the Southern European countries (Spain and Italy above 20) and the UK (18.8 in 2000) are at the upper end in the EU.

These indicators and their development over time suggest that disposable income of Austrian households clusters more around the mean than in most other countries in the EU. However, in the 1990s and early years of 2000, income inequality has increased.

A measure which is widely used to represent the degree of inequality is the Gini coefficient (Gini, 1936). One way of visualising the Gini-coefficient is by using the analytical tool of the Lorenz Curve (Lorenz, 1905). By arranging the percentages of the population from the poorest to the richest on the x-axis and the cumulated percentages of household income on the yaxis, the $45^{\circ}$ line represents a Lorenz curve, in which everyone enjoys the same income. If some people receive less income than their share in the population, the Lorenz curve is below the diagonal and its slope will increasingly rise as one moves up the income scale. The Gini coefficient is the ratio of the area between the diagonal and the Lorenz curve and the triangular region below the diagonal. It is a direct measure of income differences measuring absolute mean differences. It captures the income difference between every pair of incomes in the population, avoiding the concentration on differences between the individual income level and the mean (relative mean differences).

In 2003, the Gini coefficient of the disposable income distribution of the entire population was 25.9 , i.e., almost the same as in 1999 (25.2). However, the Gini coefficient has increased significantly between 1993 and 1999 (by 1.4 points) while it had stagnated between 1993 (23.8) and 1983 (23.6). With a level of the Gini coefficient of 25.9 in 2003, the Austrian income distribution corresponds to that of the Netherlands; only Denmark has a lower degree of income inequality with 22.5 in 2000. The Southern European countries have the highest inequalities of disposable household incomes in Europe (Italy: 34.7; Greece: 34.5) closely followed by the UK (32.6) and Ireland (30.4).

Between 1999 and 2003, income inequality has increased in Austria for the population of working age. All 3 indicators, i.e., the Gini coefficient, the squared coefficient of variation
(SCV) and the mean log deviation (MLD) have increased. These increases were small in comparison to what happened in the case of the distribution of disposable income of the retirement age population. Both at the top and bottom end of the income distribution did the variance or deviation from the mean increase significantly. This may have something to do with the fact that SILC includes capital income and income of self-employed in the income while this information was missing from the micro-census, the data source for the earlier periods. While this omission does not make much difference in the main working age, where the major source of income is wage and salary income, the situation changes once in retirement. Thus the rise in income inequality of persons of retirement age cannot be taken at face value but may be due in its entirety to the lack in comparability of data (Table 1)

Another point to be raised is to what extent real median disposable household income per capita has risen over time. As can be seen from Table 1, real median income per capita of the entire population has risen between 1999 and 2003 by $15.5 \%$ or $€ 133$ to $€ 988$, while declining in the 1990s. The median of real disposable household income of the retirement age population increased more than proportionately compared to the median real household income of the population of working age. To what extent the increase over the last couple of years is a result of the inclusion of income from capital and self-employment shall be followed up.

Table 1: Evolution of income inequality over time (equivalence elasticity=0.5)

## Components of disposable income by income group

The distribution of net earnings (after tax and including transfer payments) across three income groups: the bottom three deciles ("lower incomes"), the four middle deciles ("middle incomes"), and the top three deciles ("higher incomes") has changed very little over time. The share of lower income groups in the population has remained around $16 \%$, of the middle income groups around $37 \%$, and the higher income groups at around $48 \%$. The income distribution is most polarised in the case of income from self-employment, where $70 \%$ accrues to higher income groups and only $8 \%$ to lower income groups. In contrast, transfer payments go largely to the lower income groups such that, in $2003,23 \%$ of transfer payments went to lower income groups and $40 \%$ to higher income groups. Taxes, on the other hand, are largely paid by higher and medium income groups. Only $10 \%$ of tax revenues stem from lower income groups, compared to $57 \%$ from higher income groups. If more than 1 person in the household is working, the equivalent income of household members is rising more than proportionately (Graph 1).

The distribution of transfer payments (the sum of social security transfers including retirement benefits from public sources, unemployment benefits, child \& family allowances from public sources, all income-tested and means-tested benefits) has changed in favour of middle and upper income groups in the total population. While, in 1983, $32.7 \%$ of all social transfer
payments accrued to the bottom $30 \%$ of all income groups, their share declined to $25.8 \%$ in 1999 and further to $22.9 \%$ in 2003 (Table 2).

Table 2: Cumulative shares of income components by decile (equivalence elasticity=0.5)
Graph 1:

Distribution of income by source and of taxes by major income group: 2003


As can be seen in Graph 2, transfer payments are the most important source of disposable income for the low income groups. The significance of transfer payments in terms of their share in disposable income declines as the level of disposable income rises. In 2003, more than $50 \%$ of disposable income of the low income groups (bottom 30\%) of the total population were transfer payments. In contrast, the top $30 \%$ get only about a third of their disposable income from transfer payments, in the main pensions.

On the other hand, market income represents an increasingly important source and share of disposable income as equivalence household income rises. For households in the upper middle and higher income groups, earnings from spouses and other household members are an increasingly important source of income. Earnings of the latter groups are the major reason for households to move into the upper income range. Thus, increasing inequality of income is partly the result of spouses contributing increasingly to household income and thereby filling in the upper middle and higher income range. Single earner households or households, in which spouses and other members of households have low market income tend to be in the lower to lower middle income range.

Graph 2:

Contribution of source of income to disposable household income: 2003


Capital income and income from self-employment represent a relatively small proportion of household income. The contribution is polarised in terms of income distribution, adding fairly large proportions to household income at the lower and upper end of the income spectrum. While the bulk of capital income at the lower end tends to be from transfers from households to households, returns on assets and private pensions tend to be the major sources at the upper end (Table 3).

Table 3: Average income structure by decile (equivalence elasticity=0.5)
A closer look at the role of various components of transfer payments for income by deciles shows that housing benefits and unemployment benefits are the single most important element of transfer payments for households at the bottom income deciles. Even though no more than $23 \%$ of transfer payments go to the bottom $30 \%$ of households, more than $70 \%$ of all housing benefits go to this income group. Also unemployment benefits go more than proportionately to the lower income groups, namely 44\%. In contrast, $40 \%$ of all transfer payments go to the upper income tier, whereby the major bulk is old age pensions, namely $47 \%$ of all old age pension payments. Family cash benefits are more evenly distributed over income deciles. $43 \%$ of all family cash benefits go to the middle income households, one third to the lower tier and one quarter to the highest income tier.

Graph 3:

Structure of transfer payments by income decile: 2003


In 2003, on average about $39 \%$ of disposable income of the entire population were the result of a transfer payment, quite similar to 1983 and 1993 ( $38 \%$ in both years). In the low income groups (bottom 3 income deciles), between $46 \%$ and $61 \%$ of disposable income are the result of transfers while transfers make up less than one third of disposable income of the top 3 income deciles.

Transfer benefits going to the lower income tier tend to be heavily biased towards old age pensions - making up about $50 \%$ of all transfer payments to this income group. The second most important component of transfer payments to this lower income group are family cash benefits - about $28 \%$ of all transfer payments, followed by disability benefits and unemployment benefits.

In contrast, in the upper income tier, the major component of transfer payments are old age pensions, namely two third of the transfer payments going to this income group. The other important sources of transfer payments are family cash benefits, some $12 \%$ of all transfer payments to this income group, followed by disability benefits (Table 4).

Table 4: Percentage shares of type of transfers in disposable income of each decile (equivalence elasticity $=0.5$ )

## Winners and losers of relative income changes in the 1990s

## Changes in the composition of the population by income and household type

Before examining the changes in the relative per capita income position of persons living in the various household types, we look at the changes in the composition of the population by family/household type. We concentrate first on the number of individuals living in households, which are headed by a person of working age (below 66). In $2003,78.6 \%$ of all individuals in Austria were living in a household in which the household head was below 66, clearly less than in 1999 ( $83.7 \%$ ). Apart from this ageing effect of the population the composition of household types within this category has undergone significant change over time. The largest number of people is living in households with two adults and children; but the proportion of the population living in this household type has declined significantly since the early 1990s. In 2003 only $40.5 \%$ of all individuals were living in a household with two adults and children compared to some $53 \%$ in 1993 (and about the same share in 1983). Within that group only a very small proportion of individuals is living in a household with nobody working, only some 1.3\%.

The largest number of individuals is living in a household with children and two or more working; their share has increased from the early 1980 to the end of the 1990s, but has decreased again in the early years of 2000 almost to the levels of the early 1980s. The break in this trend in the early years of 2000 may be linked to the reform of the child benefit system, which was conducive to increasing the share of single earner two adult households with children. Thus, the declining trend in this household type between the early 1980s and the late 1990s has come to an end. While their share had declined from $27.8 \%$ in 1983 to $13.5 \%$ in 1999 , it increased again and reached $15.3 \%$ in 2003.

Second in numbers of individuals by household types are two adult households with no children. This household type is becoming more prominent over time, independent of the degree of integration of the household members into gainful employment. Also the share of employed singles is increasing, as well as the share of single adults with children (Graph 4).

Real per capita equivalence income is highest in the household type of two adults, both working, no children. This household type has been able to increase its income in the early years of 2000 versus the last decade. Next in line are couple households with children where both partners are working. Also this household type could experience significant increases in income in the early years of 2000 . Singles who are working, with no children, are not only a growing household type but are enjoying continuous income rises as are singles, who are not working. Access to employment continues to be a guarantee for a high and rising per capita income.

Graph 4: Household structure with a head below 66 years of age

Proportion of individuals living in the various types of households


S:WIFO-Calculations

Graph 5: Real monthly disposable income of individuals by household type in AS (1983=100)
Monthly equivalence income per capita and household type in euro


An interesting feature of the early years of 2000 is that singles with children, working or not working, could improve their income situation versus 1999, which may have been the result of the reforms in the family benefit scheme of 2000. Thus, the tide towards impoverishment of single parents with children could be stemmed (Graph 5).

Changes in the structure of the population by employment status of households go a long way in explaining changes in income distribution. The rising number of double income earners for example, contributes to the widening of the income distribution. On the other hand, there are also significant changes in earning power within groups. E.g., per capita disposable income of the single working adult with no children has increased significantly and consistently since the early 1980s, thus contributing to a widening of the income spectrum. In contrast, the income of single adults with children has declined in the 1990s, for working and non-working singles, and could only slightly raise its income without reaching the levels of 1993 yet. This development may be a result of increasing part-time work of single parents. In any case, both between group and within group changes affect the per capita distribution of disposable income.

The largest proportion of low income persons (with household head of working age), are either single parents with or without work or two adult households with children, where nobody has a job, and to a certain extent also single jobless adults without children. In 2003, between $60 \%$ and $80 \%$ of members of these household types were in the bottom $30 \%$ income groups. Between 1983 and 1993, the relative per capita income situation has deteriorated for single parents and jobless parents with children. Single parents in the low income groups are to a large extent either amongst the working poor or almost totally dependent on transfer payments. Another aspect to be taken into account is declining income as the number of children rises (Table 5).

Table 5: Household structure and inequality (equivalence elasticity=0.5)
Table 5 provides the per capita disposable income distribution by household type. One may calculate an MLD index for every one of the 10 household types with working age head. This indicator provides insight into the inequality of income within these groups. Accordingly, inequality is most pronounced in the single jobless adult household with children (5.0) followed by two earner households with children (4.9) and single earner/two adult households without children (4.8). Inequality is least pronounced in one earner/two adult households with children and jobless households consisting of two adults with children.

## Changes in the composition of the population by income and age category

The change in income distribution is not only affected by changing behavioural patterns which result in the formation of so-called non-traditional household types, but also by the changing age composition of the population and changes in earning power of the various age groups. Earnings tend to rise with experience and age up to a point in time when people
start to retire from working life. Thus, the rising share of middle aged and older persons of working age suggests, ceteris paribus, a widening of the earnings distribution over time. However, earnings within age groups may change over time as well, thus leaving the outcome in terms of income inequality open.

The proportion of children under 17 and young adults ( $18-25$ year olds) has declined between 1983 and 2003 (from $24.7 \%$ to $20.6 \%$ and from $11.7 \%$ to $9.8 \%$ respectively) and the proportion of adults in every major age group has increased, except in the case of the 66-75 year olds. This latter age group is small due to low birth rates in the times of the depression and the further decimation of those cohorts in WWII (Graph 6).

Graph 6: Changing age composition of the population

Changing age composition of the population

s :WIFO-Calculations
Per capita income of children as well as over 65 year olds tends to be lower than the average for the population and above average for persons of prime working age. In that context one has to clarify that per capita income of children refers to the income of households with children - equivalent incomes are assigned to the household members including children. Accordingly, persons living in households with children under 17 tend to have on average lower incomes than middle aged people without children. In 2003, real monthly per capita income was $10 \%$ lower for persons under 17 than for the population average. Older persons also have below average per capita disposable income. In 2003, persons older than 75 had $9 \%$ lower per capita incomes than the population average and 6675 year olds $7.5 \%$ lower incomes. It was older persons who experienced a pronounced
improvement of their real disposable income between the early 1980s and the early years of 2000, particularly $66-75$ year olds. Their income used to be $18 \%$ respectively $21 \%$ below the population average.

Table 6: Distribution of household disposable income by age category and gender
Graph 7: Real per capita disposable income by age category
Real mean monthly income per capita by age group (1983=100, equivalence elsaticity $=0.5$ )


S:WIFO-Calculations
The highest income earners are individuals aged 41 to 50 . Their per capita income surpassed the population average by $9 \%$ in 2003 (in 1983 the difference was even $+17 \%$ ). The high average per capita disposable income of persons aged 41-50 is in the main the result of the high proportion of persons in their prime working age and earnings peak, given the pronounced seniority wages in Austria. In 2003, 39\% of the 41 - 50 year olds were in the top $30 \%$ income group in contrast to $20 \%$ in the case of under 17 year olds.

Table 6 and Graph 7 indicate that every age group experienced rises in real income per capita in the early years of 2000, after declines in the 1990s. In the 1990s, only older persons had been bale to improve their relative income position. They tended to move from the bottom income deciles to the middle income groups. In contrast, younger age groups tended to be the losers in their relative income position. This tendency could be reversed between 1999 and 2003.

## Evolution of poverty

The term poverty has descriptive-analytical as well as normative aspects. On the one hand factors which determine the standard of living, e.g., income, wealth, resources, access to goods and services, have to be taken into account, on the other norms or standards have to be defined which determine under what conditions a person may be considered to live in poverty. We argue, following the ILO (ILO, 1976) that poverty is given in situations where a person may not participate fully in social, cultural and political life and has difficulties satisfying basic economic needs as a result of insufficient economic means.

This paper looks at poverty only in terms of cash income as the sole dimension of poverty, without considering the role of benefits in kind or wealth to alleviate deprivation. The poverty rate is generally defined in relative terms, i.e., as the proportion of individuals falling below $60 \%$ (or $50 \%$ or $40 \%$ ) of median equivalent household disposable income. Thus, the poverty threshold is relative to the median income.

In Austria, but also in Germany, the typical poverty measure was $50 \%$ of the mean equivalence income, which was at least in the 1980s about the social assistance threshold (Ausgleichszulage). The difference between the $60 \%$ median and the $50 \%$ mean is very small if at all, as the mean income tends to be higher than the median. The choice of the equivalence scale, i.e., the weights given to additional household members, is important not so much for the poverty threshold but rather for the structure of poverty by household size.

In Austria, the share of individuals (head count) with net incomes after taxes and transfers below $60 \%$ of the median has increased steadily from $11.4 \%$ in 1983 to $13.7 \% 1993$ and $15.6 \%$ 1999. According to SILC-data the share decreased slightly to $14.1 \%$ in 2003. Also the proportion of individuals falling below $50 \%$ of the median income has increased over time: from $6.1 \%$ to 7.4 and $9.3 \%$. Again SILC data indicates a decline of the poverty rate to $8.2 \%$ in 2003. SILC-data has the advantage of distinguishing gross and net income after taxes and transfers. Accordingly, the tax and transfer system is successful in reducing the poverty rate significantly. $21.9 \%$ of the total population have a gross equivalence income at $60 \%$ or below the median income and $17.3 \%$ below the $50 \%$ threshold. The deviation of the income of the poor from the median is significant, indicating an increasing casualisation of income below the poverty line (Table 10).

The degree of inequality of incomes of the poor as measured by the Gini coefficient is fairly small but increases when lowering the poverty line from $60 \%$ of median income (16.6) to $30 \%$ of median income (18.4).

## Table 7: Evolution of "absolute" and relative poverty

An additional indicator may be calculated which measures the intensity of poverty, the income or poverty gap ratio (mean poverty gap). This ratio informs about the average shortfall of the income of the poor relative to the poverty line. In Austria, the average shortfall
of the poor in terms of the $60 \%$ poverty line was $28 \%$ in 1999 and declined somewhat until 2003 to $27 \%$. If we take the $50 \%$ poverty line, the income gap decreased between 1983 and 1993 from $27.6 \%$ to $20.7 \%$, but increased again, in line with the head count, between 1993 and 1999 to $30 \%$; again until 2003 a slight decline to $29 \%$ is observable. This is to say that the average disposable income of the poor settled at around $30 \%$ of the poverty line.

If one wants to take the development of real income into account, one may calculate an 'absolute' poverty rate by relating real income to a constant threshold, i.e., the median income of 1983. According to this indicator, poverty increased in Austria between 1993 and 1999 from $4.7 \%$ to $8.4 \%$ ( $60 \%$ poverty line) since real median income declined somewhat. Only if we fix the poverty line at a level of $30 \%$ of the median income of 1983 does the poverty rate decline between 1993 and 1999 (from 2.3 to $1.7 \%$ of the entire population). Again, SILC indicates a certain improvement of the income situation of the poor.

The poverty rate differs by household structure and work attachment of the household members. In the household category with household head of working age the poverty rate (at a $50 \%$ poverty line) is most pronounced in the jobless single parent case. In this household type $44 \%$ of all individuals were living under the poverty line in 2003 (WASACHNW in Table 8). Second in line are single adults without work (WASANCNWS) with $31.3 \%$ living below the poverty line.

These are much higher poverty rates than for any category of retirement age persons.

Table 8: Poverty rates before and after taxes and transfers by household type

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(I) The upper bound value is the value of the real income at the upper breaking point of the corresponding decile. Thereforere the upper bound value of decile I corresponds to the income of the
Io per cent up from the bottom individual (referred to as DI value); that of decile 9 , to the income of the 90 per cent up from the botom individual (referred to as the D9 value) and that of decile 10 ,
to the highest (possibly top coded) income value.
to the highest (possibly top coded) income value.
(2) MLD callulations are based on "botom coded" values Wij* (see the section about bottom coding).
(3) Shaded cells are empty.
(4) Population 18 to 65 years old.
(5) Population above 65 years old.
ECU-exchange rate: mid 80 's: 15.9689 ; mid- 90 's: 13.6238 ; ca 2000:13.7603
Equivalence elasticity $=0.5$
Table 2: Cumulative shares of income components by decile


|  | Entire population |  |  |  |  | Working age population (1) |  |  |  |  | Retirement age population (2) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Private Pensions | Occupatio nal pensions | Other private transfers | Other capital income | Total capital income (K) | Private Pensions | $\left\lvert\, \begin{gathered} \text { Occupatio } \\ \text { nal } \\ \text { pensions } \end{gathered}\right.$ | Other private transfers | Other capital income | Total capital income (K) | Private Pensions | Occupatio nal pensions | Other private transfers | Other capital income | Total capital income (K) |
| Decile 1 | 4.0\% |  | 14.0\% | 4.8\% | 9.9\% | 5.1\% |  | 59.4\% | 9.2\% | 11.6\% | 0.0\% |  | 9.3\% | 14.5\% | 7.0\% |
| Decile 2 | 6.5\% |  | 26.5\% | 7.4\% | 18.1\% | 6.3\% |  | 6.3\% | 6.3\% | 18.1\% | 14.6\% |  | 14.6\% | 14.6\% | 15.7\% |
| Decile 3 | 8.9\% |  | 38.1\% | 10.4\% | 25.9\% | 6.5\% |  | 6.5\% | 6.5\% | 26.0\% | 14.6\% |  | 14.6\% | 14.6\% | 21.1\% |
| Decile 4 | 12.6\% |  | 53.1\% | 14.9\% | 36.2\% | 12.1\% |  | 12.1\% | 12.1\% | 36.1\% | 19.0\% |  | 19.0\% | 19.0\% | 26.1\% |
| Decile 5 | 16.1\% |  | 63.7\% | 19.1\% | 44.0\% | 18.8\% |  | 18.8\% | 18.8\% | 43.7\% | 20.0\% |  | 20.0\% | 20.0\% | 31.9\% |
| Decile 6 | 26.0\% |  | 70.3\% | 25.7\% | 51.0\% | 21.9\% |  | 21.9\% | 21.9\% | 49.0\% | 26.8\% |  | 26.8\% | 26.8\% | 40.3\% |
| Decile 7 | 28.9\% |  | 77.3\% | 36.8\% | 58.7\% | 23.1\% |  | 23.1\% | 23.1\% | 55.0\% | 49.4\% |  | 49.4\% | 49.4\% | 50.0\% |
| Decile 8 | 34.7\% |  | 86.7\% | 45.7\% | 67.4\% | 33.8\% |  | 33.8\% | 33.8\% | 64.8\% | 51.1\% |  | 51.1\% | 51.1\% | 65.4\% |
| Decile 9 | 46.6\% |  | 92.1\% | 61.8\% | 76.8\% | 38.8\% |  | 38.8\% | 38.8\% | 73.3\% | 74.5\% |  | 74.5\% | 74.5\% | 78.4\% |
| Decile 10 | 100.0\% |  | 100.0\% | 100.0\% | 100.0\% | 100.0\% |  | 100.0\% | 100.0\% | 100.0\% | 100.0\% |  | 100.0\% | 100.0\% | 100.0\% |

Table 3 : Components of disposable income by decile

| Entire population |  |  |  |  |  |  |  |  | Working age population (1) |  |  |  |  |  |  |  | Retirement age population (2) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | EH | ES | EO | K | SE | TR | TA | [ ${ }_{\text {EH+ES+ES }}$ | EH | ES | EO | K | SE | TR | TA | [ $\begin{array}{r}\text { EH+ES+ES+ } \\ \mathrm{K}+\mathrm{SE}+\mathrm{TR} \\ \text { TA }\end{array}$ | EH | ES | EO | K | SE | TR | TA | [ $\begin{array}{r}\text { EH+ES }+ \text { ES } \\ \mathrm{K}+\mathrm{SE}+\mathrm{TR} \\ \text { TA }\end{array}$ |
| Mid-2000s |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Decile 2 | 44.0\% | 14.7\% | 4.2\% | 2.6\% | $7.1 \%$ | 49.6\% | -22.1\% | 100.0\% | 50.8\% | 16.4\% | 4.6\% | 1.9\% | 8.7\% | 42.3\% | -24.6\% | $100.0 \%$ | 1.0\% | 1.4\% | 1.6\% | 2.0\% | $2.6 \%$ | 101.4\% | -10.1\% | 100.0\% |
| Decile 3 | 47.5\% | 19.1\% | 3.2\% | 2.1\% | 8.0\% | 46.0\% | -25.8\% | 100.0\% | 54.7\% | 20.0\% | 6.2\% | 1.9\% | 10.0\% | 35.2\% | -28.1\% | 100.0\% | $0.1 \%$ | 0.6\% | 3.1\% | 1.0\% | $2.6 \%$ | 105.7\% | $-13.2 \%$ | 100.0\% |
| Decile 4 | 50.2\% | 17.6\% | 7.9\% | 2.3\% | 10.1\% | 39.8\% | $-27.8 \%$ | 100.0\% | 57.5\% | 20.3\% | 10.5\% | 2.1\% | 8.3\% | 31.4\% | -30.2\% | 100.0\% | 3.4\% | 2.6\% | 0.9\% | 0.8\% | 4.1\% | 105.2\% | -17.1\% | 100.0\% |
| Decile 5 | 49.9\% | 21.4\% | 11.7\% | 1.6\% | 8.4\% | 37.3\% | -30.2\% | 100.0\% | 53.0\% | 25.6\% | 16.5\% | 1.4\% | 11.2\% | 25.7\% | -33.5\% | 100.0\% | 1.1\% | 1.0\% | 6.4\% | 0.8\% | 3.4\% | 105.6\% | -18.3\% |  |
| Decile 6 | 46.2\% | 25.0\% | 17.6\% | 1.3\% | 10.4\% | 32.5\% | -32.9\% | 100.0\% | 51.7\% | 25.6\% | 20.1\% | 0.9\% | 8.8\% | 28.0\% | -35.0\% | 100.0\% | 3.1\% | 4.5\% | 11.3\% | 1.1\% | 5.6\% | 96.4\% | ${ }^{-22.1 \%}$ | 100.0\% |
| Decile 7 | 47.4\% | 24.1\% | 18.8\% | 1.2\% | 10.8\% | $\frac{32.7 \%}{31.6 \%}$ | - $-35.0 \%$ | 100.0\% | 50.5\% | 28.6\% | $\frac{19.2 \%}{24.8 \%}$ | ${ }^{0.9 \%}$ | ${ }^{12.2 \%}$ | 25.3\% | -36.8\% | ${ }^{100.0 \%}$ | 1.7\% $2.0 \%$ | $\frac{3.9 \%}{3.7 \%}$ | 15.9\% | $\frac{1.15}{1.5 \%}$ | ${ }^{6.77^{\circ}}$ | ${ }^{94.0 \%}$ | ${ }^{-23.2 \%}$ | $\frac{100.0 \%}{100.0 \%}$ |
| Decile 8 | 43.1\% | $\frac{28.3 \%}{28.1 \%}$ | $\frac{20.0 \%}{25.8 \%}$ | $\frac{1.2 \%}{1.1 \%}$ | 13.2\% | 31.6\% | $\xrightarrow{-37.4 \%}$ | ${ }^{100.0 \%}$ | 42.8\% | $\frac{30.8 \%}{31.2 \%}$ | $\frac{24.8 \%}{26.2 \%}$ | 1.3\% | $\frac{13.5 \%}{18.1 \%}$ | $\frac{25.1 \%}{19.6 \%}$ | $\stackrel{-38.2 \%}{-41.0 \%}$ | 100.0\% | 2.0\% | ${ }^{3.7 \%}$ | $\frac{20.9 \%}{21.5 \%}$ | $\frac{1.5 \%}{1.1 \%}$ | $\xrightarrow{4.4 \%}$ | ${ }_{85}^{97.4 \%}$ | ${ }_{-}^{-27.6 \%}$ | $\frac{100.0 \%}{100.0 \%}$ |
| Decile 16 | 42.4\% | 25.7\% | 15.2\% | 1.9\% | 34.7\% | 28.5\% | -48.4\% | 100.0\% | 45.5\% | 28.2\% | 15.2\% | 2.1\% | 36.7\% | 22.2\% | -49.8\% | 100.0\% | 7.1\% | 7.2\% | 15.6\% | $1.1 \%$ | 21.5\% | 87.8\% | -40.3\% |  |
| total | 43.9\% | 23.6\% | 15.1\% | 1.7\% | 16.7\% | 34.6\% | -35.7\% | 100.0\% | 48.4\% | 26.3\% | 16.9\% | 1.6\% | 17.3\% | 27.0\% | -37.5\% | 100.0\% | 2.9\% | 4.5\% | 12.9\% | 1.2\% | 9.8\% | 95.0\% | ${ }^{-26.3 \%}$ | 100.0\% |

(1) Population 18 to 65 years old.
(2) Population above 65 years old.



As an example, the shaded cell contains the cumulative share of family cash benefiss received by households individuals of decile 1 and 2 as a percentage of total family cash benefits
given that households individuals are rakted by ascending values of disposable income per equivalent houschold member):
(2) Population 18 to 65 years old.

Transfer types:
$\mathrm{OAP}=$ old-age cash benefit
$\mathrm{DB}=$ disability benefits
$\mathrm{IDB}=$ occupational injury and disease benefit
$\mathrm{SP}=$ survivors benefits.
$\mathrm{SP}=\mathrm{surrivors} \mathrm{benefits}$
$\mathrm{FCB}=$ family cash benefits:
$\mathrm{UB}=$ unemployment benefit
$\mathrm{HB}=$ housing benefits
$\mathrm{OTH}=$ benefits on other contingencies
Components of public transfers by decile

| Entire population |  |  |  |  |  |  |  |  |  | Working age population (1) |  |  |  |  |  |  |  |  | Retirement age population (2) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | OAP] DB |  | OIDB | SP | FCB] | UB] | HB] | OTH\| | TR | OAP | DB] | OIDB | SP | FCB | UB | HB | OTH\| |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Decile 1 | 44.4\% | 6.5\% | 1.8\% | 0.9\% | 28.2\% | 15.0\% | 2.1\% | 1.1\% | 100.0\% | 24.4\% | 10.9\% | 2.1\% | 1.46 | 32.0\% | 24.8\% | 2.6\% | 1.8\% | 100.0\% | 97.0\% | 0.3\% | 1.1\% | 0.1\% | 0.6\% | 0.3\% | 0.4\% | 0.2\% | 100.0\% |
| Decile 2 | 54.7\% | 6.8\% | 1.1\% | 0.9\% | 26.6\% | 7.8\% | 1.6\% | 0.6\% | 100.0\% | 39.5\% | 13.9\% | 1.4\% | 2.4\% | 28.4\% | 12.0\% | 1.7\% | 0.7\% | 100.0\% | 98.3\% | 0.0\% | 0.6\% | 0.0\% | 0.2\% | 0.3\% | 0.5\% | 0.1\% | 100.0\% |
| Decile 3 | 53.7\% | 7.2\% | 0.8\% | 2.0\% | 28.9\% | 6.2\% | 1.1\% | 0.1\% | 100.0\% | $42.8 \%$ | 11.2\% | 1.3\% | $3.2 \%$ | 32.6\% | 8.0\% | 0.7\% | 0.1\% | 100.0\% | 97.7\% | 0.7\% | 0.0\% | 0.0\% | 0.4\% | 0.5\% | 0.4\% | 0.3\% | 100.0\% |
| Decile 4 | 55.2\% | 6.7\% | 1.3\% | 1.9\% | 28.2\% | 5.7\% | 0.6\% | 0.4\% | 100.0\% | 42.2\% | 14.7\% | 2.1\% | $2.4 \%$ | 27.3\% | 10.1\% | 0.6\% | 0.8\% | 100.0\% | 98.0\% | 0.5\% | 0.2\% | 0.0\% | 0.6\% | 0.5\% | 0.0\% | 0.2\% | 100.0\% |
| Decile 5 | 61.2\% | 8.2\% | 1.1\% | 1.0\% | 23.0\% | 5.2\% | 0.2\% | 0.1\% | 100.0\% | 50.4\% | 15.3\% | 1.7\% | 0.9\% | 24.1\% | 7.3\% | 0.3\% | 0.1\% | 100.0\% | 96.7\% | 1.0\% | 0.0\% | 0.6\% | 1.0\% | 0.6\% | 0.0\% | 0.0\% | 100.0\% |
| Decile 6 | 63.2\% | 7.5\% | 1.3\% | 1.2\% | 20.6\% | 5.7\% | 0.4\% | 0.1\% | 100.0\% | 58.4\% | 11.3\% | 1.7\% | 1.9\% | 19.6\% | 6.7\% | 0.3\% | 0.1\% | 100.0\% | 98.1\% | 0.1\% | 0.0\% | 0.5\% | 1.0\% | 0.3\% | 0.0\% | 0.0\% | 100.0\% |
| Decile 7 | 67.4\% | 8.0\% | 0.9\% | 1.4\% | 18.9\% | 3.1\% | 0.1\% | 0.1\% | 100.0\% | 58.7\% | 14.3\% | 0.9\% | 2.5\% | 18.7\% | 4.5\% | 0.2\% | 0.2\% | 100.0\% | 96.8\% | 0.4\% | 0.0\% | 0.8\% | 1.6\% | 0.2\% | 0.0\% | 0.1\% | 100.0\% |
| Decile 8 | 70.3\% | 8.6\% | 0.6\% | 2.1\% | 14.3\% | 3.8\% | 0.1\% | 0.1\% | 100.0\% | 67.1\% | 8.8\% | 0.7\% | 2.46 | 15.0\% | 5.8\% | 0.1\% | 0.0\% | 100.0\% | 97.3\% | 0.9\% | 0.2\% | 0.1\% | 0.9\% | 0.5\% | 0.0\% | 0.1\% | 100.0\% |
| Decile 9 | 76.0\% | 5.7\% | 0.6\% | 1.6\% | 13.2\% | 2.9\% | 0.0\% | 0.0\% | 100.0\% | 65.3\% | 12.0\% | 2.0\% | $2.4 \%$ | 15.3\% | 2.9\% | 0.1\% | 0.1\% | 100.0\% | 96.5\% | 1.2\% | 0.1\% | 0.2\% | 1.5\% | 0.5\% | 0.0\% | 0.0\% | 100.0\% |
| Decile 10 | 81.6\% | 6.0\% | 1.1\% | 0.7\% | 9.6\% | 0.8\% | 0.1\% | 0.2\% | 100.0\% |  |  | 0.9\% | 1.2\% | 10.8\% | 1.5\% | 0.1\% |  |  | 98.4\% | 0.4\% | 0.4\% | 0.1\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% |  |
| TOTAL | 65.5\% | 7.1\% | 1.0\% | 1.3\%/ | 19.5\% | 4.8\%\% | 0.5\% | 0.2\% | 100.0\% | 56.0\% | 11.8\% | 1.4\% | 2.0\% | 20.7\% | 7.1\% | 0.5\% | 0.4\% | 100.0\% | 97.5\% | 0.6\% | 0.2\% | 0.2\% | 0.9\% | 0.3\% | 0.1\% | 0.1\% | 00.0\% |

Table 5 : Household structure and inequality

|  | Household with a head below 66 Working age head, WA |  |  |  |  |  |  |  |  |  |  | $\frac{\text { Household with a head } 66 \text { and over }}{\text { Retirement age head, RA }}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Single adult, w WASACHWR single adult with children working |  |  | Households with no Chill <br> wTANAc\|w <br> Two and more adults <br> no children <br> one working$\|$ | ren (2) watancrw Two and moracatuls no children non working |  | Two-adults Households <br> WATACH1W <br> Two and more adults with children one working | with Children (2) WATACHNW Two and more adults with children non working | $\begin{gathered} \text { WATOTAL } \\ \text { all } \end{gathered}$ | $\begin{array}{c}\text { Russuvk } \\ \text { single a alulth } \\ \text { working }\end{array}$ | RassNw single a alutht not working |  |  | $\begin{gathered} \text { two and more adults, } \\ \text { non working } \end{gathered}$ | $\underset{\substack{\text { Rerotal } \\ \text { all }}}{ }$ |
| id-80s |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 11533.17 | 6898.77 | 7973.13 | 4212.91 | 14235.19 | 10881.21 | 9074.70 | 11857.09 | ${ }_{828}$ | 5997.04 | 103420 | ${ }_{6322.67}$ | ${ }_{688626}$ | 13176.19 | 1270976 | 8054,17 |  |
|  | 3.4\% | 2.4** | 2.2\% | $1.4 \times 2$ a | 123\% | 5.880 | 34** | 229920 | 27.8\% | 1.7\% | 83.4** | 0.0\% | 6.4\% | 0.7\% | 2.1\% | 73\%\% | 16.6 |
| Deciel | $2.3{ }^{2}$ | 34.5\% | 20,62 | 69309/ | 0.9\% | 4.8\% | 14,00\% | 1.420 | 7.8\%\% | 41.88 | 7,9\% | 810\% | 332\% | 0.5\%\% | 0.9\%/ | $21.6 \%^{\circ}$ | 2278 |
| Deciele Decile | $\frac{270^{\circ}}{43^{\circ}}$ | $\frac{16.42^{2}}{13,6}$ | $\frac{14.508}{1059}$ | $\frac{10.02}{56 \%}$ | $\frac{0.8 \%}{100 \%}$ | $\frac{46.68}{780 \%}$ | $\frac{10.55^{\circ}}{1140^{*}}$ | $\frac{23.3}{3.60}$ | $\frac{18,3 \%}{17700}$ | $\frac{19.49^{4}}{94}$ | $\xrightarrow[9,200^{20}]{ }$ | 0.0.0\% | $\frac{22.0 \%}{14.4 \%}$ | ${ }_{\text {a }}^{0.00_{0}}$ |  | $\frac{11.880}{1.19 \%}$ |  |
| ${ }^{\text {Decile }}$ - | 11,42\% | 10.2\% | 13.3\%\% | 5.120 | 1.6\% | 7,6\% | $11.0 \%$ | $\frac{1.702}{6}$ | 172\% | 11.10 | 102\% | 0.02\% | 999\% | $2.8 \%$ | 8.080 | 13.120 | 10.88 |
|  | $\frac{15999}{154.4}$ | $\frac{82 \%}{4020}$ | ${ }^{8,729}$ | $\frac{2208}{22^{20}}$ | $\frac{3,9 \%}{6,96}$ | $\frac{12.70^{\circ}}{12000}$ | 10.8.800 | $\frac{11.002}{13,02}$ | $\frac{10.70 \%}{1070}$ | ${ }^{6.63^{\circ}} 6$ | $\frac{9.884}{10.88}$ | ${ }^{0.002} 0$ | $\frac{75 \%}{49 \%}$ | $\frac{13,3 \%}{9,9 \%}$ | 10.40\% | $\frac{12880}{7700^{\circ}}$ | $\frac{10.50}{609}$ |
| ${ }^{\text {Dececie }}$, | 13.19\% | 4.29 | 9.6\% | 1.0\% | $14.3 \%$ | $16.0 \%$ | 10.7\% | 14,3\% | 6.4\% | 2.709. | 10.76 | 0.0\% | 2.8\% | 11.70\% | 14.7\% | 7.442 | 6.7w |
| ${ }^{\text {Deciele }}$, | 9,5\% |  | 5.6\% | 1.709 | 17,9\% | 117\%\% | 10.2\% |  |  |  |  |  |  |  | 12.48 | 6.4.4. |  |
| ${ }^{\text {D Peile }}$ deil | 12.50\% | 2.3, ${ }^{2,3 \%}$ | 1.8.8\% | 2.0.0\% | 21.5\%\% | 10.08\% | 6.0\%\% | $12.3{ }^{12}$ | , $3.30 \%$ | 1.20 | 10.920 | 0.0\%\% | 22\%\% | 20.20\% | 1,7,6\% | 4.2.20 |  |
|  | 100.0\% | 100.0\% | 100.020 | 100.0\% | 1000\% | $1000 \%$ | $1000 \%$ | 100.0\% | 100,0\% | 100002 | $1000 \%$ | 100.020 | 1000\% | 1000.020 | 100.020 | 100,020 | 00.0\% |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | ${ }^{13263}$ | ${ }_{8151}$ | 12486 | 10793 | 17516 | 12253 | 11300 | 1256 | 9954 | ${ }^{7259}$ | 13372 | 1587 | 9888 | 1689 | 14688 | 11508 | ${ }^{11466}$ |
|  | 4.4\%/ | 23\%/2, | 5.1\% | 299\% | 8.7\%2 | 4.4 | 3.420 | 34.92 | 17.9\% | 1.002 | 84.52. | 0.02\% | 6.62 | 0.920 | 1.6\%) | 6.4.2) | 15.58 |
| Decile | 5. | ${ }^{43,20}$ | ${ }^{111.1}$ | d | 0.5\% | ${ }^{788 \%}$ | 11.1.20 | 12 | 180\%\% | ${ }^{4.55 \%}$ | ${ }_{8,5}^{8.5}$ | 4.10\% | ${ }^{27,790}$ | $\frac{22006}{}$ | 3.5\% | ${ }^{13,3,36}$ |  |
| Decilie: |  |  |  |  |  |  |  |  |  |  |  |  |  | , |  |  |  |
| Dectie: ${ }^{\text {deceie }}$ : |  |  |  |  |  |  | ${ }_{14 .}^{14}$ |  |  | ${ }_{\text {L }}^{1,5}$ | ${ }_{90}$ |  |  |  |  |  |  |
| Decilie: |  |  | $\frac{10,5}{} \frac{108}{}$ |  | 9, ${ }_{\text {9, \% }}$ | 96 | $\frac{12.5 \%}{45 \%}$ |  | ${ }_{\text {rev* }}^{49 \%}$ |  |  |  | 5 | ${ }_{14,5 \%}^{10.5}$ |  |  |  |
|  | ${ }_{12,20}^{12,}$ | ${ }_{\text {5,4 }}$ | ${ }_{8}^{82}$ |  |  |  | ${ }^{8,790^{\circ}}$ | ${ }^{14.8 \%}$ |  | 2.59\% | ${ }_{112}^{112}$ | $\frac{172.20}{}$ | 54** | 19,3.3\% | 10,9\% | ${ }_{6}^{6.5 \%}$ |  |
| Decile ${ }^{\text {dem }}$ | $\frac{8,8 \%}{1000 \%}$ | ${ }^{2,26 \%}$ | $10.0{ }^{\text {a }}$ |  | $\frac{24.10 \%}{2+100}$ |  | $\frac{3050}{}$ | ${ }^{14.42^{2} \times 2}$ |  | $\frac{0.02 \%}{1020}$ | ${ }^{10.75}$ | 3, |  | $\frac{20,3 \%}{20, \%}$ | 11, 1 | $\frac{5,5}{5,9}$ |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{\|l\|l\|} \hline \text { Grioup Mean Diposible hicomeici } \\ \text { Real Ther } \end{array}$ | ${ }_{13902}$ | 9001 | ${ }^{8396}$ | ${ }_{5301}$ | 1743 | ${ }^{1324}$ | 1123 | 1284 | 9232 | 6864 | 1275 | 9041 | 9482 | 15373 | ${ }^{13887}$ | 11900 | 1172 |
|  | 4.8\%\% | 20\%\% | $2.8 \%$ | 0.5\% | 15.19, | 7.88\% | 4.68 | 31.820/ | 13.5\% | 0.802 | 88,7\% | 0.00 | 4992, | 1.3\%/ | 23\%/ | 7.882 | 16.3.3 |
| Decie | 2.12 | 23.902 | 24.102 | 70.10 | 3.2\% | $8.8{ }^{8}$ | 13.7\% | 92\% | $14.5 \%$ | 39.5\%/ | 10.12 | 5.5\% | 15,0\% | 7,70. | 7.7\% | 7.0\% | 9,5620. |
| Decie ? | 2.6\% | 21.6\% | 20.30. | 18.929 | 3.1\% | 6,0\% | $11.42^{2}$ | 6.4.4. | 19,9\% | 2699\% |  | $43.8 \%$ | 23,6\% | 7.5\% | ${ }^{6.3 \%}$ | $12.44^{6}$ |  |
| ${ }^{\text {Deciele }}$ Decie | ${ }^{7}$ | $\frac{14.909}{100}$ | $\frac{20.70^{2}}{100}$ | \% $6.800^{2000}$ | 2.8\% |  | ${ }^{11.77^{*} 0}$ | 6.9\% | $\frac{20.8 \%}{1.50 \%}$ | $\frac{12.8 \%}{14.0}$ | $\xrightarrow{9.5 \%}$ | $\frac{18.400}{40}$ | $\frac{1770^{\circ}}{140^{\circ}}$ | 3.6\% | ${ }_{5}^{56 \%}$ | 13.7\% |  |
| ${ }_{\text {Deciele }}$ S | 10.2\% | 6, 2.2 | 10.520 | 0.59\% | 4.4** | $11.9 \%$ | $13.6 \%^{\circ}$ | $11.42^{2}$ | 10.6\% | 32\% | 9,8\% | 0.0\% | 72\% | 6.30\% | 10.6\% | $1.45 \%$ | ${ }_{11,10}$ |
| Decile of | 15.9\% | 7.0\% | 4992 | $0.4{ }^{\text {a }}$ | 5.8\% | $11.1 \%$ | 9.5\% | 12.7\% | 8.0\% | 1.8\% | 10.0. | 8.9\% | 7.9\% | 6.7\% | 107\% | 9.5\% | 9.002 |
| Decie o | 12.929 | 6.0.0 | 3.2\% | ${ }^{0.00 \%}$ | 10.6\% | ${ }^{13.2 \%}$ | 933\% | ${ }^{12.9904}$ | 4.0\% | 1.7\%\% | 102\% | 5.4\% | $4.7 \%$ | 10.3. | $143 \%$ | 9.6\% |  |
| ${ }_{\text {Decile }}$ Decie | 10.2\% | ${ }^{4.20 \%}$ | 12.2\% | 0.0.0\% | 122.7\% | 10.08\% | $\frac{1.72 \%}{6,2 \%}$ | $11.3{ }^{\text {m }}$ | 1.8\% | 2.0\% | 10.8.8 | 9,7\% | 3.6\% | 14.5.8\% | $\frac{14.1 .2 \% \%}{10 \%}$ | , | ${ }_{\text {c, }}^{1.5}$ |
| $\frac{\text { Deciel }}{\text { Told }}$ | $\frac{9.40^{2}}{100.08}$ | $\frac{1170 \%}{10009}$ | $\frac{0.909}{100.094}$ | $\frac{0.42^{2}}{100.2}$ | $\frac{28.4 .9}{10.0 \%}$ |  | $\frac{5.920}{1000 \%}$ | $\frac{8.00 \%}{1000 \%}$ | $\frac{1.60 \%}{100 \cdot 0}$ | -0.0\% | $\frac{10.33^{\circ}}{100.0}$ |  | (2.70\% | $\frac{21.60 \%}{100.0 \%}$ | 12.48\% | (6.4.4.0.0. | 100.0 |
| mid-2000s |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| roup Mean Diposable In | 1110.60 | 751.58 | 76.68 | 557.06 | 1407.12 | 109999 | 970.25 | 1179.77 | ${ }_{14,46}$ | ${ }^{624,21}$ | 4 | ${ }^{(0151531)}$ | 86.123 | 1400.17 | ${ }_{159961}$ | 979,46 | 1082. |
| \%oldivivalus in cach group | 5.9\%8 | $33^{3 \%}$ | 2.5\% | ${ }^{1.10 \%}$ | 15.3.2. | 6.60 | 34420 | 23,9\% | 15.580 | 13\%/ | 78.620 | (0.1\%) | 529.4, | 4.700 d | 4.4*2, | 6.992/ | 21.4 |
| Decile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dectic: |  | ${ }_{880}$ |  | $\frac{14.4}{165}$ | 42 | ${ }_{\text {7 } 78 \%}$ | 9.0 |  |  |  |  | (223.80\% | $\frac{1270 \%}{10.00^{2}}$ | $\frac{29 \% \%}{}$ |  |  |  |
| ${ }^{\text {Dectice }}$ D | $\frac{12}{11}$ |  | ${ }_{15,4}^{15}$ |  | $\frac{48.70}{6}$ | \%, 9.0 | \%00\% | \% |  | (4.4* | 9,9\%\% | (11,7\%) |  | 2,4. |  |  |  |
| ${ }_{\text {Deceile }}$ Ded | 9.9 | (13.9\%) | (2.9\%\% | (20\% | 11.1\% | $11.9 \%$ | ${ }_{1}^{10.8 \%^{2}}$ | ${ }_{1}^{142 \%}$ | $\frac{600}{60}$ | (1.4\%) | 10,1\% | 0.0\%\% | ${ }_{6}^{6.70}$ | 15,8.80 | 9,10 | ${ }_{8,3}$ | 9, |
| ${ }^{\text {Dacile }}$ Decie |  |  | ${ }_{\text {9,2\% }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\frac{\text { Decile il }}{\text { Toprat }}$ | $\frac{10,3}{1000}$ | $\frac{148800^{(100 \% ~}}{1}$ | $\frac{100 \%}{1000 \%}$ | 100, ${ }^{\text {a }}$ | $\frac{21.60^{2}}{100.0 \%}$ | $\frac{12.6 \%}{100.0}$ |  | $\frac{10.40^{2}}{100.0}$ | 00.en | $\frac{0.00 \%}{100.0 \%}$ |  |  | 7\% | 15,3\% | $\frac{1022^{2}}{100.0}$ |  |  |

[^4]
## Table 6 : Distribution of household disposable income by age category




Table 7 : Evolution of "absolute" and relative poverty
Table data range A1:N23

|  | mid-80s |  | 1993 |  | ca. 2000 |  | mid-2000s |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Poverty threshold $\quad$ Poverty indicator | Before taxes and transfers | After taxes and transfers | Before taxes and transfers | After taxes and transfers | Before taxes and transfers | After taxes and transfers | Before taxes and transfers | After taxes and transfers |
| Relative poverty |  |  |  |  |  |  |  |  |
| Poverty threshold $=60$ per cent of the current median income |  |  |  |  |  |  |  |  |
| headcount ratio <br> standard error of the headcount ratio <br> mean pov gap <br> median pov gap |  | 0.114 |  | 0.137 |  | 0.156 | 0.219 | 0.141 |
|  |  |  |  |  |  |  | 0.004 | 0.004 |
|  |  |  |  |  |  | 0.282 | 0.511 | 0.272 |
|  |  |  |  |  |  |  | 0.464 | 0.208 |
| Poverty threshold $=50$ per cent of the current median income |  |  |  |  |  |  |  |  |
| headcount ratio standard error of the headcount ratio mean pov gap median pov gap |  | 0.061 |  | 0.074 |  | 0.093 | 0.173 | 0.082 |
|  |  |  |  |  |  |  | 0.004 | 0.003 |
|  |  | 0.276 |  | 0.207 |  | 0.300 | 0.552 | 0.294 |
|  |  |  |  |  |  |  | 0.548 | 0.221 |
| Poverty threshold $=40$ per cent of the current median income |  |  |  |  |  |  |  |  |
| $\square$ <br> headcount ratio <br> standard error of the headcount ratio <br> mean pov gap <br> median pov gap |  |  |  |  |  | 0.054 | 0.135 | 0.044 |
|  |  |  |  |  |  |  | 0.004 | 0.002 |
|  |  |  |  |  |  | 0.305 | 0.598 | 0.336 |
|  |  |  |  |  |  |  | 0.642 | 0.265 |
| Absolute poverty |  |  |  |  |  |  |  |  |
| Poverty threshold $=50$ per cent of the median income in the mid-1990s: |  |  |  |  |  |  |  |  |
| headcount ratiostandard error of the headcount ratiomean pov gapmedian pov gap |  |  |  | 0.023 |  | 0.054 |  | 0.060 |
|  |  |  |  |  |  |  |  | 0.002 |
|  |  |  |  | 0.296 |  | 0.700 |  | 0.309 |
|  |  |  |  |  |  |  |  | 0.221 |

Table 8: Poverty rates before and after taxes and transfers by household type

| Total population | mid-2000s |  |
| :---: | :---: | :---: |
|  | $\begin{gathered} \begin{array}{c} \text { Before taxes and } \\ \text { transfers } \end{array} \\ \hline \end{gathered}$ | $\begin{gathered} \text { After taxes and } \\ \text { transfers } \end{gathered}$ |
| Working age head |  |  |
| Household structure and work attachment |  |  |
| 1) WASANCWR | 0.089 | 0.096 |
| 2) WASANCNW | 0.345 | 0.313 |
| 3)WASACHWR | 0.304 | 0.125 |
| 4)WASACHNW | 0.796 | 0.444 |
| 5) WATANC2W | 0.014 | 0.016 |
| 6)WATANCIW | 0.244 | 0.074 |
| 7)WATANCNW | 0.386 | 0.126 |
| 8)WATACH2W | 0.044 | 0.026 |
| 9)WATACHIW | 0.249 | 0.102 |
| 10)WATACHNW | 0.424 | 0.353 |
| TOTAL | 0.150 | 0.079 |
| Retirement age head |  |  |
| Household structure and work attachment |  |  |
| 11) RASAWR | (0.460) | (0.222) |
| 12) RASANW | 0.289 | 0.190 |
| 13) RATA $2 W$ | 0.076 |  |
| 14) RATAIW | 0.282 | 0.060 |
| 15) RATANW | 0.340 | 0.105 |
| total | 0.258 | 0.093 |
| Age of individuals |  |  |
| 0-17y | 0.183 | 0.085 |
| 18-25y | 0.134 | 0.081 |
| 26-40y | 0.128 | 0.070 |
| 41-50y | 0.102 | 0.069 |
| 51-65y | 0.214 | 0.074 |
| 66-75y | 0.299 | 0.123 |
| above 75 | 0.268 | 0.124 |
| TOTAL | 0.173 | 0.082 |

All poverty thresholds refer to the entire population ( $50 \%$ of median income in each year)


ADDITIONAL DETAILS, HOUSEHOLD TYPES

| Working age head Household structure and work attachment | $\xrightarrow{\substack{\text { mid-2000s } \\$ Before taxes and $\\ \text { transfers }$$\\ \hline \\ \text { Atter taxes and } \\ \text { transers }}}$ |  |
| :---: | :---: | :---: |
|  |  |  |
| Single adult households without children: |  |  |
| working full-time working part-time | $\begin{array}{r} 0.062 \\ (0.374) \end{array}$ | $\begin{array}{r} 0.070 \\ (0.374) \end{array}$ |
| Single adult households with children |  |  |
| working full-time | 0.226 | 0.099 |
| working part-time | 0.531 | (0.200) |
| Two or more adults without children: |  |  |
| Two or more working full-tim | (0.007) | (0.012) |
| At least one working full-tim¢ | 0.205 | 0.086 |
| Other working | 0.157 | (0.028) |
| \|Two or more adults with children: |  |  |
| Two or more working full-tim | 0.033 | 0.023 |
| At least one working full-time | 0.233 | 0.093 |
| Other working | 0.091 | 0.049 |



## Methodological Annex

## This annex reproduces the "terms of reference" of the OECD

## 1. Definitions

The unit of observation of the survey is the household. A household is defined as a collection of individuals who are sharing the same housing unit. ${ }^{1}$ In the distribution, each household is weighted by the number of individuals who belong to this household. For instance, a household of four people has a weight equal to four; this is equivalent to considering a distribution in which this household is represented by four individuals with the same level of income.

Individuals are ranked according with the value of the "adjusted" disposable income per equivalent household member of the household to which they belong. For instance, if $Y_{i}$ denotes the total disposable income of household $i$, the "adjusted" income of each member $j$ of household $\mathrm{i}\left(\mathrm{W}_{\mathrm{i}}\right)$ is calculated as following :
[1] $\quad W_{i j}=\frac{Y_{i}}{S_{i}^{\varepsilon}}$
where $S_{i}$ is the number of members in household $i$ and $\varepsilon$ is the equivalence elasticity.

All income components are reported on an annual basis and in constant prices (prices of the first year provided). The total household income ( $\mathrm{Y}_{\mathrm{i}}$ ) is defined as the total disposable income; it includes wages and salaries, self-employment incomes, realised property incomes, cash transfers from the general government less taxes and social security contributions paid by households. Non-cash income components (e.g., imputed rents) should be excluded. Information on the total (non-equivalised) disposable income and its component should be provided so as to allow comparisons with external data (to be reported in the sheet "Characteristics" of the Excel file).

[^5]
## 2. Reference populations

For Tables 1, 2, 3, 6 and 6bis, three separate panels refer to the entire population, to the population of working age ( 18 to 65 ) and of retirement age (over 65). Children (persons aged below 18) should be included among the entire population. For each of the three panels, income estimates are ranked separately; i.e., upper bound values should be specific to the three population groups, and each decile should contain $10 \%$ of the respective reference population.

## 3. Equivalence scale

The equivalence elasticity ( $\varepsilon$ ) characterises the amount of scale economies that households can achieve. An equivalence elasticity lower than unity implies the existence of economies of scale in household needs: any additional household member needs a less than proportionate increase of the household income in order to maintain a given level of welfare. Under this assumption, the sum (over j) of individual "adjusted" incomes $\mathrm{W}_{\mathrm{ij}}$ will exceed the total household disposable income by the amount of scale economies.

All the tables specified in this request should be calculated using an equivalence elasticity of 0.5 . This means that all incomes are adjusted by the square root of the household size ${ }^{2}$.

## 4. Income sources

The following income sources are identified:

1) EH , the wage and salary income of the household head, excluding employers' contributions to social security, but including sick pay paid by governments.
2) ES, the wage and salary income of the household spouse, excluding employers' contributions to social security, but including sick pay paid by governments.

[^6]3) EO, the wage and salary income from other household members (excluding employers' contributions to social security, but including sick pay paid by governments.
4) K, capital income, including occupational pensions and all kinds of private transfers.
5) SE, self-employment incomes.
6) TR, social security transfers from public sources (including accident and disability benefits, old-age cash benefits, unemployment benefits, maternity allowances, child and/or family allowances, all income-tested and means-tested benefits)
7) TA, taxes and social security contributions paid directly by households.

While this breakdown of income sources is used for most of the tables, Table 6bis asks for a more detailed information on different types of public transfers (see below).

To the possible extent, definitions used in calculating these income sources should be close to the recommendations adopted by the "Canberra Group on household income statistics", available at: http://www.lisproject.org/links/canberra/finalreport.pdf.

Individual disposable income per equivalent household member can then be expressed as follows:

$$
\text { [2] } \quad W_{i j}=E H_{i j}+E S_{i j}+E O_{i j}+K_{i j}+S E_{i j}+T R_{i j}-T A_{i j}
$$

In addition, we define the individual market income per equivalent household member as:
[3] $\quad M_{i j}=E H_{i j}+E S_{i j}+E O_{i j}+K_{i j}+S E_{i j}$

In both [2] and [3], all income components are expressed in terms of equivalent household member. For instance, $\mathrm{EH}_{\mathrm{ij}}$ is calculated by dividing the earning of the head by the number of household member $S_{j}$ to the power of the equivalence elasticity $(\varepsilon)$ - just like in [1] - and then allocated to each household member.

## 5. Treatment of negative income

[1] General treatment. Once equivalent household member adjustments are done, using the equivalence elasticity under consideration (see section 3), all individual components of market income (EH, ES, EO, K, SE) showing negative values should be set to zero. For instance, any negative value of self-employment income is set equal to zero.

Then, market and disposable incomes are calculated using formulas [2] and [3]. The ranking of individuals is done on the basis of these new values of disposable income. All tables requested will be built using the same ranking (e.g., distribution held constant), even when considering specific household groups.

The mean of market income and disposable income are then computed (over all incomes e.g., zero and positive incomes)
[2] When computing the MLD, the log properties require strictly positive income values (see formula [4]).

Any values of disposable income $W_{i j}$ lower than 1 per cent of the mean disposable income is set equal to 1 per cent of the mean disposable income. The "bottom coded" value of disposable income per equivalent household member is denoted by $\mathrm{W}_{i j}{ }^{*}$ (see Table 1 and Table 5).

Any value of market income $M_{i j}$ lower than 1 per cent of the mean market income is set equal to 1 per cent of the mean market income.

As a result, taking into account the adjustments described above, mean income has to be re-calculated before computing the MLD.

## 6. Time coverage

Income distributions refer to a particular year. Trends of income distribution are analysed by comparing static distributions at several points in time: mid-1980, around 1990, mid-1990, 2000 and the most recent year for which data exist (around 2005). It is to national experts to select specific years, depending on data availability. The income-years chosen should be indicated in the Excel spreadsheet.

## 7. Aggregate trends in income distributions

Table 1 describes evolution of income inequality over the last decades by using deciles values and aggregate indicators of inequality. Individuals are ranked according with their household disposable income per equivalent household member as described in equation [1]. Separate panels refer to the entire population, to the population of working age ( 18 to 65 ) and of retirement age (over 65). Individuals falling in each of the three population groups should be ranked separately (i.e., working age persons in the first decile are those in the bottom $10 \%$ of the working age population). For each reported year, the Excel Table has the following format.

Table 1: Evolution of income inequality through time.
Entire population

|  | Entire population |  | Working-age pop. |  | Retirement-age pop. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total number of individuals |  |  |  |  |  |  |
| mber of household |  |  |  |  |  |  |
|  | Upper bound value ${ }^{(1)}$ | Real mean income | Upper bound value ${ }^{11}$ | Real mean income | Upper bound value ${ }^{11}$ | Real mean income |
|  |  |  |  |  |  |  |
| total | (3) |  | (3) |  | (3) |  |
| Real median income : |  |  |  |  |  |  |
| MLD(2) <br> SCV <br> Gini <br> Gini before taxes and transfers Standard error Gini (post t\&t) Percentage of persons in top $1 \%$ |  |  |  |  |  |  |

(1) the upper bound value is the value of the real income at the upper breaking point of the corresponding decile. Therefore, the upper bound value of decile 1 corresponds to the income of the $10 \%$ up from the bottom individual (referred to as DI value); that of decile 9 , to the income of the $90 \%$ up from the bottom individual (referred to as the D9 value) and that of decile 10 , to the highest (possibly top coded) income value.
(2) MLD calculations are based on "bottom coded" values $\mathrm{W}_{i j}{ }^{*}$ (see Section 5).
(3) shaded cells are empty.

- The MLD (Mean Log Deviation) index is calculated as :
[4] $M L D=\frac{\sum_{i} \sum_{j} \log \left(\overline{W_{i j}{ }^{*}}\right)}{n}$
where $\log$ is the natural logarithm, $\mu$ is the arithmetic mean of disposable incomes $\mu=\frac{\sum_{i} \sum_{j} W_{i j}}{n}$; and n is the total number of individuals.
- The SCV (Squared Coefficient of Variation) index is calculated as :
[5] $\quad S C V=\frac{\operatorname{var}\left(W_{i j}\right)}{\mu^{2}}=\frac{\frac{1}{n} \sum_{i} \sum_{j}\left(W_{i j}-\mu\right)^{2}}{\mu^{2}}$
- The Gini index is calculated as:

$$
\text { Gini }=\left(\frac{2}{\mu \cdot n^{2}} \cdot \sum_{k=1}^{n} k \cdot W_{k}\right)-\frac{n+1}{n}=\frac{2 \operatorname{cov}\left(W_{k}, \frac{k}{n}\right)}{\mu}
$$

[6]

$$
=\frac{\frac{2}{n} \sum_{k=1}^{n}\left(W_{k}-\mu\right) \cdot\left(\frac{k}{n}-\frac{1}{n^{2}} \sum_{k=1}^{n} k\right)}{\mu}
$$

- where household incomes per equivalent household members $\left(W_{i j}=W_{k}\right)$ are ranked in ascending order (such as $k=1,2, \ldots . n$ ).

Standard errors of the Gini coefficient (post taxes and transfers) should be provided by using "bootstrap" methods. A description of the method and programming are available on the LIS site (www.lisproject.org/keyfigures/bootsstrapmethods.htm).

Data on the share of persons in the top $1 \%$ of the population (at least in the most recent year) should also be provided.

## 8. Income distribution by income sources

This section analyses how various income sources affect the distribution of household disposable income and how the structure of disposable incomes varies across deciles. The income sources considered are those specified in identity [2] above.

The following tables (Table 3 in the Excel sheet) indicate the distribution across deciles of the different income sources. Separate panels refer to the entire population, to the population of working age and to that of retirement age. Individual observations are ranked following ascending values of household disposable income per equivalent household member ( $\mathrm{W}_{\mathrm{i}}$ ), just as in Table 1. Each of the panels has the following format.

Table 3: Components of disposable income by decile

|  | EH | ES | EO | K | SE | TR | TA | EH+ES+ES+K+ <br> SE+TR-TA |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Year |  |  |  |  |  |  |  |  |
| Dec. 1 |  |  |  |  |  |  |  | $\underline{100 \%}$ |
| Dec. 2 |  |  |  |  |  |  | $\underline{100 \%}$ |  |
| $\ldots$. |  |  |  |  |  |  |  |  |
| Dec. 10 |  |  |  |  |  |  | $100 \%$ |  |

As an example, the shaded cell contains the percentage of public transfers (in DPI) received by households/individuals of decile 1 and 2 (given that households/individuals are ranked by ascending values of disposable income per equivalent household member). Taxes should be entered with a negative sign.

This information will also be used by the Secretariat to derive information on the structure of disposable income for units in each decile (Table 2, as requested in previous version of this questionnaire is no longer required).

An additional breakdown, limited to 2005, is requested for (private) capital income (K) into four components (adding up to $100 \%$ ):

1) private pensions.
2) occupational pensions.
3) other private transfers.
4) other capital income.

## 9. Additional detail on public transfers

In addition to the broad income sources reported above, we would be interested in obtaining additional information on the different types of current transfers. We are aware that the type of breakdown available may differ across countries. Where possible, we would also like to distinguish between the following:

$$
\begin{aligned}
& \text { TRij = OAPij + DBij + OIDBij + SPij + FCBij + UBij + HBij + OCBij, where } \\
& \text { 1) OAP stands for (public) old-age cash benefits; } \\
& \text { 2) DB for disability benefits; } \\
& \text { 3) OIDB for occupational injury and disease benefits; } \\
& \text { 4) SP for survivor benefits; } \\
& \text { 5) FCB for family cash benefits; } \\
& \text { 6) UB for unemployment benefits; } \\
& \text { 7) HB for housing benefits; } \\
& \text { 8) OCB for benefits on other contingencies. }
\end{aligned}
$$

The categorisation of public transfers follows that used in the OECD Social Expenditure Database (OECD, 1996, "Social Expenditure Statistics of OECD Member Countries). To the
extent possible, all types of occupational pensions (even when compulsory) should be excluded from OAP (and, a fortiori, from TR) and included in (private) "capital income.

Table 6bis: Components of public transfers by decile

|  | OAP | DB | OIDB | SP | FCB | UB | HB |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Year |  |  |  |  |  |  |  |
| Dec 1 |  |  |  |  |  |  |  |
| Dec 2 |  |  |  |  |  | $100 \%$ |  |
| $\cdots$ |  |  |  |  | $100 \%$ |  |  |
| Dec 10 |  |  |  |  |  |  |  |

As an example, the shaded cell shows the share of old age pensions in all public transfers received by individuals in the deciles 1 and 2 (given that individuals are ranked by ascending values of disposable income per equivalent household member).

## 10. Income inequality for sub-groups of the population

The aim of this section is to analyse level and changes in the relative position of subgroups of the population on the income ladder; and how these sub-groups have contributed to the overall trends of income inequality (see Table 7).

Individuals are grouped in household categories depending first on the age of the household head (working age head, i.e., below 65; and retirement age, i.e., above 65); and second, within each of the two groups, according to the number of adults in the family and to the number of household members in employment (work attachment).

1) households structure:

|  | WORKING AGE HEAD (WA) | RETIREMENT AGE HEAD (RA) |
| :--- | :---: | ---: |
| By number of adults in the <br> household | Single adults (SA); Two and more adults (TA) | Single adults (SA); Two and more adults (TA) |
| By presence of children <br> By work attachment of <br> household members <br> With children (CH); Without children (NC) | No worker (NW); Worker (WR) | No worker (NW); Worker (WR) |

Households with a working-age head are cross-classified according to each of the criteria, thus resulting in 10 groups:

1) WASANCWR working-age head, single adult, no children, working
2) WASANCNW working-age head, single adult, no children, non working
3) WASACHWR working-age head, single adults, with children, working
4) WASACHNW working-age head, single adults, with children, non working
5) WATANC2W working-age head, two or more adults, no children, two or more working
6) WATANCIW working-age head, two or more adults, no children, one working
7) WATANCNW working-age head, two or more adults, no children, non working
8) WATACH 2 W working-age head, two or more adults, children, two or more working
9) WATACHIW working-age head, two or more adults, children, one worker
10) WATACHNW
working-age head, two or more adults, children, no workers

Household with a retirement-age head are cross-classified by the number of adults in the household and by work attachment of household members, resulting in 5 groups

| 11) RASAWR | retirement-age head, single adult, one worker |
| :--- | :--- |
| 12) RA SANW | retirement-age head, single adult, no worker |
| 13) RATA2W | retirement-age head, two or more adults, two or more workers |
| 14) RATAIW | retirement-age head, two or more adults, one worker |
| 15) RATANW | retirement-age head, two or more adults, no worker |

An adult is any individual above 18 years old. A worker (W) is an adult with a non-zero annual earning or self-employment income. Therefore, for instance, an individual belongs to the WASACHNW group if he/she belongs to a household with a working-age head, with a single adult in the household, with children, and with no income from work.

Table 7 provides information for each of the above groups.

Table 7: Household structure and inequality.

|  | Household with a working age head |  |  |  | Households with a retirement age head |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | WASANCWR | $\ldots$ | WATACHNW | Total (1) | RASAWR | ... | RATANW | Total (2) |
| Year <br> Group mean disposable income in real terms \% individuals in each group |  |  |  |  |  |  |  |  |
| [a] \% of individuals in: |  |  |  |  |  |  |  |  |
| Decile ${ }^{(3)}$ <br> Decile ${ }^{10^{(3)}}$ <br> [b] TOTAL | 100\% | 100\% | 100\% |  | 100\% | 100\% | 100\% |  |

(1) Total, in percent of the entire population.
(2) Total, in percent of the entire population. (1) $+(2)=100 \%$
(3) Same ranking as in Table 1.
[a] This panel refers to individuals across deciles, for each household type.
[b] Columns corresponding to the total for the working-age and retirement-age headed households should sum to $100 \%$.

For households with a head of working age and limited to the most recent year, this version of the questionnaire also asks for information to allow a better characterisation of "workers" and of "families with children". Data on mean income and shares of persons in each group should be provided for the following categories:

## Breakdown by full- and part-time work

Single adult households without children:
Working full-time
Working part-time
Single adult households with children:
Working full-time
Working part-time
Two or more adult households without children
Two or more working full-time
One working full-time
Others working
Two or more adult households with children
Two or more working full-time
One working full-time
Others working

## Breakdown by number of children

Single adult households with children, working:
One child
Two children
Three of more children
Single adult households with children, not-working:
One child
Two children
Three of more children
Two or more adult households with children, working:
One child
Two children
Three of more children
Two or more adult households with children, not-working:
One child
Two children
Three of more children

## 11. The profile of incomes according to the age of individuals

This section describes how the age-profile of household real incomes has evolved over the time and how its structure in terms of income sources has changed. This will be done by establishing for each period a static income distribution according with various age categories and by analysing how this distribution has changed over the time.

Lifetime profiles should identify the following age categories:

1) 0 to 17 years old.
2) 18 to 25 years old.
3) 26 to 40 years old.
4) 41 to 50 years old.
5) 51 to 65 years old.
6) 66 to 75 years old.
7) over 75 years old.

Table 9 summarises the information required for each age category.

Table 9: Distribution of household disposable income by age category

(1) Same ranking as in Table 1.

In addition to this breakdown by age of individuals, information is also required (for the first time) by gender. This breakdown should be provided, limited to 2005, at the bottom of Table 5.

## 12. Income poverty

This section identifies the proportion of individuals living in low-income households and the characteristics of the household to which they belong to.

Poverty is defined using both a "relative" and an "absolute" definition:

- Relative poverty: the poverty threshold is expressed as a given percentage (40,50 and $60 \%$ ) of the current median income in each year. Therefore, it changes (in real terms) over time.
- "Absolute" poverty: the (relative) poverty threshold remains constant (in real terms) over time. Differently from previous version of this questionnaire, consultants are asked to keep constant (in real terms) the relative (50\% of median income) threshold of mid-1990s (even when data for the mid-1970s and mid-1980s are available).

We use two indicators to characterise poverty:

The headcount ratio: the number of individuals with disposable household income per equivalent member lower or equal to the poverty threshold, as a percentage of the total number of individuals in the groups considered.

The income gap expressed as \% of the poverty threshold. It is calculated as the average gap between the poverty threshold and the disposable income of poor expressed as a percentage of the poverty threshold. Thus:
[13] mean poverty gap $=\frac{\left(z-\mu_{p}\right)}{z}=\frac{\left(\frac{1}{p} \sum_{i=1}^{p} \sum_{j}\left(z-W_{i j}\right)\right)}{z}$ where p is the number of poor and $\mu_{p}$ the mean income of the poor.
[14] median poverty gap $=\frac{\left(z-\mu_{p}\right)}{z}=\frac{\left(\frac{1}{p} \sum_{i=1}^{p} \sum_{j}\left(z-W_{i j}\right)\right)}{z}$ where p is the number of poor and $\mu_{p}$ the median income of the poor.

At least for the most recent year, the poverty gap should also be calculated using the median income of the poor.

Standard errors of the headcount rate should be provided by using "bootstrap" methods. A description of the method and programming are available on the LIS site (www.lisproject.org/keyfigures/bootsstrapmethods.htm).

Table 10 gives an overview of the evolution of poverty (both absolute and relative), for the entire population. For each year, the table is as follows:

Table 10: Evolution of "absolute" and relative poverty

|  | Before taxes After taxes and and transfers transfers |
| :---: | :---: |
| Poverty threshold = 60 per cent of <br> Headcount ratio standard error of the headcount ratio <br> Mean poverty gap <br> Median poverty gap <br> Poverty threshold = $\mathbf{5 0}$ per cent of <br> Headcount ratio standard error of the headcount ratio <br> Mean poverty gap <br> Median poverty gap <br> Poverty threshold = 40 per cent of <br> Headcount ratio <br> standard error of the headcount ratio <br> Mean poverty gap <br> Median poverty gap | erty : <br> he current median income <br> he current median income <br> he current median income |
| "Absolute" po <br> Poverty threshold = 50 per cent of the $m$ <br> Headcount ratio <br> standard error of the headcount ratio <br> Mean poverty gap <br> Median poverty gap | verty : <br> edian income in the mid-1990s: |

Table 11 gives a more detailed description of which kind of households are at risk of poverty, before and after accounting for net transfers (taxes and transfers). The household and age breakdown is the same as in the previous sections. In Table 11, the poverty threshold is set at $50 \%$ of the current median disposable income, and poverty is expressed in terms of the headcount ratio.

Table 11: Poverty rates before and after taxes and transfers, by household type
Head count ratio


In the first columns, poverty indicators for the 1970-period are based on market income $M_{i j}$ (see identity [3]); individuals with market income lower or equal to half of the median disposable income are counted as poor (i.e., the poverty threshold is the same as in Table 10). In the second column, poverty indicators are based on disposable income.

For the most recent year, data on relative poverty rates are also requested for the additional categories specified in Table 7, Section 10 (to allow a better characterisation of "workers" and of "families with children").


[^0]:    1 This research has been commissioned by the OECD. I gratefully acknowledge research assistance of Martina Agwi and Andrea Sutrich. Thanks is also due to the EU-SILC Team of Statistics Austria for providing the SILC-Data.
    2 For details see Baver - Lamei (2005), Statistics Austria (2006A).
    ${ }^{3}$ Questions on income have been included in the Austrian micro census (household survey) whereby only a small fraction of household income from self-employed work is included, namely the new selfemployed (contract work and other alternative forms of employment). Capital income is largely ignored as a source of income.

[^1]:    ${ }^{4}$ An even more comprehensive information on the income distribution in Austria is obtained by matching income tax data files of the Ministry of Finance with Social Security data and the micro census; Statistics Austria undertook that calculation on demand of the general audit office twice so far (Rechnungshof, 2002; Rechnungshof, 2006). The individual microdata files are not accessible to research, also not on an anonymised basis.
    ${ }_{5}$ Current income is deflated by using the consumer price index (CPI) relative to 1983; i.e., income is expressed in Euro, with 1983=100. Additional calculations are undertaken for 2003 income in euro, whereby 2005=100.
    6 A value less than 1 implies that household welfare can be maintained with a less than proportionate increase in income as another household member is added. A value of 1 implies no economies of scale, a value of zero no rise in household needs as household size increases. There is no consensus on the correct elasticity. EUROSTAT adapted the OECD scale by differentiating the weights of additional members of household by age (children under 14 are given a weight of 0.3 and adults 0.5 ).

[^2]:    7 The international data stems from Förster (2003), which provides information on the most recent surveys of the respective countries, i.e., around the year 2000.

[^3]:    8 The index levels of SCV and MLD are multiplied by 100.

[^4]:    FURTHER DETALIS ON hOUSEHOLD TYPES
    HEAD or working age in 2005
    
    

    | Breakdown by number of children: singles |  |
    | :--- | :--- |
    | Single adut thouscholds with children, working | Single adult houscholds with childern, not working |

    
    
    

[^5]:    1 However, data on a family basis (if available, and only for 2005) are requested for the first time to allow a better identification of "lone parents". See Section 10.

[^6]:    2 For instance, the income of a household with four persons would be divided by two.

