

## INCOME, LIVING CONDITIONS AND FISCAL BURDEN OF HOUSEHOLDS | YEAR 2019

# Risk of poverty or social exclusion lowered in the year before the pandemic

In 2019 the share of population **at risk of poverty or social exclusion** decreased from 27.3% to 25.6%, in comparison with 2018, due to lower rates of severe material deprivation and low work intensity among households. The share of individuals at risk of poverty remained stable at 20.1%.

In 2018, the average **household net income (31,641 euros per year)** increased in current values (+0.8%) but not in real terms (-0.4%).

Income inequality was unchanged: the income of the **richest quintile of the population** was still more than **six times higher than the income of the poorest quintile**.

## +1.1%

### Median household net income growth

Median household net income was 25,716 euros (2,143 euros per-month)

## +0.8%

### Real income growth in the South and Islands.

Negative in the North-east and in the Centre, stable in the North-west.

## 45.6%

### Mean tax and contribution wedge

The average labour cost was 32,130 euros per year. The average net wage for the employee was little more than half (17,486 euros)

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## LIVING CONDITIONS

### The share of the population at risk of poverty or social exclusion diminished

In 2019, 20.1% (20.3% in 2018) of the population in Italy (about 12,060 million persons) was at risk of poverty, with a net equivalent income (without imputed rents and in-kind components) lower than 10,299 euros (858 euros per month) in the previous year. Moreover, 7.4% of the population (down from 8.5% in the previous year) was in a state of severe material deprivation, showing four out of the nine signals of deprivation set out in the Europe 2020 strategy. Finally, 10.0% of the population (slightly down from 11.3% in 2018) lived in households with low work intensity, i.e. households with components aged between 18 and 59 years, who worked less than a fifth of the available time during the income reference year.

The overall population at risk of poverty or social exclusion, i.e. the share of individuals who were in at least one of the three above conditions, was 25.6% (down from 27.3% in 2018).

Between 2018 and 2019, the AROPE indicator in the Eu28 (At-Risk-Of-Poverty-or-Exclusion) decreased from 21.8% to 21.4%, but increased in Malta (+1,1%) and in Sweden (+0.8%).

The 2019 figure for Italy was lower than that of Bulgaria (32.5%), Romania (31.2%), Greece (30.0%), Latvia (27.3%) and Lithuania (26.3%), but much higher than that of countries, such as the Czech Republic (12.5%), Slovenia (14.4%) and larger countries such as Germany (17.4%) France (17.9%), and Spain (25.3%).

### In the South and Islands the share of population at risk of poverty decreased

South and Islands remained the geographical area of the country with the highest percentage of individuals at risk of poverty or social exclusion (42.2%, down from 45.0% in 2018). In particular, the share of people in severe material deprivation and of those living in households with low work intensity decreased (from 16.7% to 13,6% and from 19.0% to 17.3%, respectively). The share of population at risk of poverty, however, slightly increased from 34.4% in 2018 to 34.7% in 2019.

The lowest level for the AROPE indicator was 13.2% in the North-east (it was 14.6% in 2018). The reduction was particularly marked in the Centre (from 23.1% in 2018 to 21.4% in 2019): in both areas all the indicator's sub-components were lower compared to the previous year. The AROPE indicator was quite stable in the North-west (from 16.8% to 16.4%).

## INCOME AND LIVING CONDITIONS: KEY FIGURES

Years 2018-2019, mean values in euros, out of 100 individuals, percentage values

INDICATOR	2018					2019				
	North-west	North-east	Centre	South and Islands	Italy	North-west	North-east	Centre	South and Islands	Italy
Household net income (excluding imputed rent)*	34,211	35,386	32,945	25,415	31,393	34,642	35,165	32,988	25,910	31,641
Risk of poverty or social exclusion	16.8	14.6	23.1	45.0	27.3	16.4	13.2	21.4	42.2	25.6
Risk of poverty (*)	12.2	10.5	16.3	34.4	20.3	12.4	9.5	15.3	34.7	20.1
Average tax rate at households level (*)	20.7	19.9	20.6	16.4	19.5	20.8	19.7	20.3	16.9	19.5
Labour cost (*)	36,038	34,164	32,481	25,437	31,783	35,987	34,042	32,821	26,658	32,130

(\*) the indicator is calculated on the calendar year preceding the survey year

## The risk of poverty or social exclusion was still high in large households

In 2019 the prevalence of the risk of poverty or social exclusion was still higher for individuals living in households with five or more components (34.3%), despite a sensible reduction over the previous year (it was 36.9%). In particular the AROPE indicator was higher in households with three or more children (34.7%, down from 36.0% in 2018), for single persons (30.6%; 32.4% if younger than 65 years) and in single-parent households (34.5%; it was 35.4% in 2018). Compared to the previous year, there was a reduction in the AROPE indicator for all household types, except for couples without children, for whom it moved from 17.1% in 2018 to 18.3% in 2019. The indicator showed a large reduction for couples with children (from 27.2% to 24.1%) thanks to the decrease of the severe material deprivation indicator (from 8.2% to 5.9%). In particular, clear signs of improvements were observed for individuals living in households with two children (23.5%, it was 28.3% in 2018): they experienced a sensible reduction in the risk of poverty (from 22.6% to 19.5%).

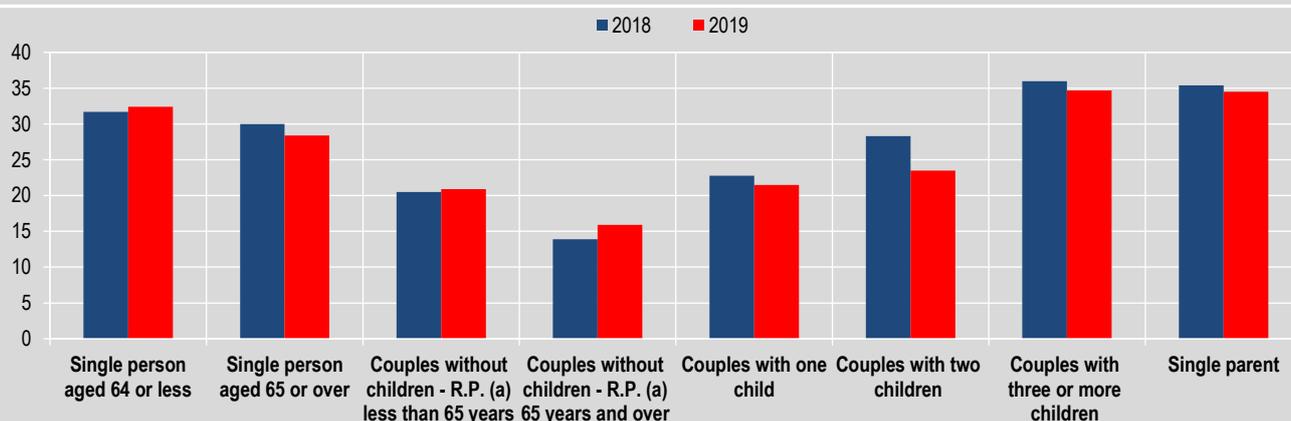
Improvements were observed also for those individuals living in large households with at least one minor child (from 29.7 in 2018 to 27.0% in 2019), especially in households with three or more minor children (from 38.8% in 2018 to 35.4%).

The risk of poverty or social exclusion diminished for those individuals living in households whose main income source was self-employment (from 28.6% to 25.1%) and pension and public transfers (from 33.0% to 31.8%) while it slightly decreased in those with income from employment (from 20.8% to 20.0%).

As in 2018, households with at least one foreign member showed a risk of poverty or social exclusion much higher (38.1%, with a clear improvement over 2018, when it was 42.7%) than households with only Italian members (24.0%). The gap was still large both for the risk of poverty (31.3% vs 18.7% for households with only Italian members) and for severe material deprivation (13.4% vs 6.6%), whereas low-work intensity was much lower in households with at least one foreign member (6.1% a vs 10.6%).

**FIGURE 1. POPULATION AT RISK OF POVERTY OR SOCIAL EXCLUSION BY HOUSEHOLD TYPE**

Years 2018-2019, out of 100 individuals



(a) R.P.: reference person.

## HOUSEHOLD INCOME

### Household income growth slowed

In 2018, average household net income (excluding imputed rents) was 31,641 euros, about 2,640 euros per month. Growth in household income was lower compared to the previous year at current prices (+0.8% from +2.6%) and turned negative at constant prices (-0.4% from +1.2%). Equivalised income, that takes account of scale economies and allows for income comparisons between households of different size and composition, grew by 0.5% in real terms. It should be noted that the reference "income" does include some components that are not considered in the definition of household income harmonized at European level, such as luncheon vouchers, non-monetary fringe benefits (except for the market value of the company car already included in the European definition) and the monetary value of goods produced for own consumption.

Compared to the previous year, in 2018 the average household income at constant prices (excluding imputed rents) grew only in the South and Islands (+0.8%), while decreased in the Centre (-1.0%) and in the North-east (-1.8%) and was unchanged in the North-west (+0.1%). The largest increases were observed for couples without children (+0.7%) and for couples with children (+0.5%). Mean real income was lower for single-person households (-2.5%).

The overall real income reduction with respect to the 2007 level, the year before the first signs of the crisis, was still marked with an average real loss of 9.1% for household income and of 6.3% for equivalised income. Looking at geographical areas, total reduction in household income amounted to 12% in the Centre, 11.3% in the South and Islands, 11.0% in the Centre, 7.6% in the North-east and 6.6% in the North-west. Considering different household types, average total real income losses with respect to 2007 were higher for large households (-8.7%, -9.3% and -10.4% for households with three, four and five or more members, respectively), whereas they were clearly lower for household with two members (-2.3%) and for single-person households (-1.8%).

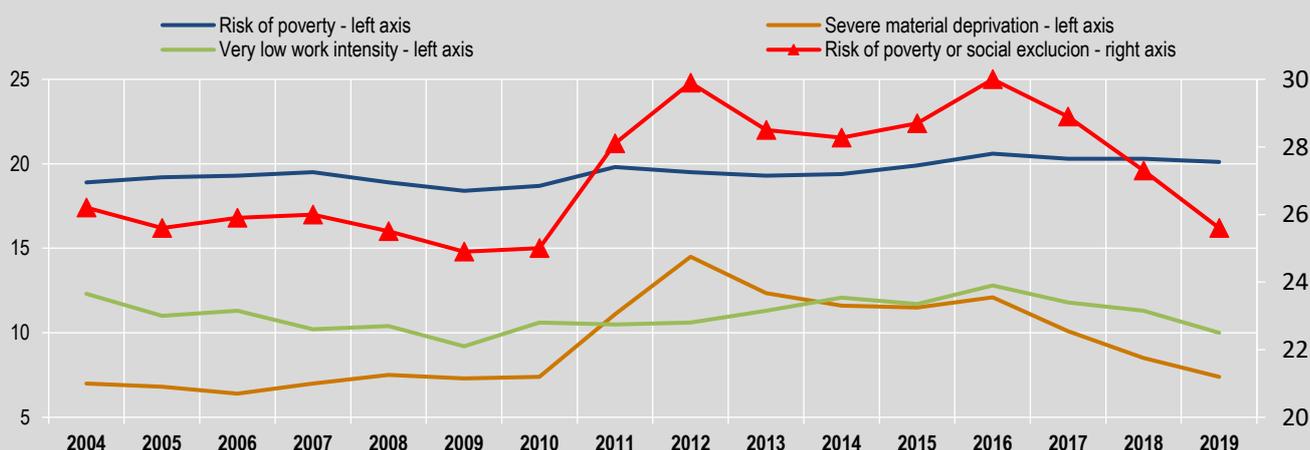
In order to compare living standards of households living in their main accommodation as owner-occupiers with those of households paying actual rents (approximately one fifth of all households), it is appropriate to include imputed rents of owner-occupiers, life tenants and free-rent tenants.

In order to compare living standards of owner and tenant (one-fifth of households) households, it is appropriate to include imputed rent of houses owned, in usufruct or free use in the calculation of disposable income.

In 2018, household income including imputed rents amounted to 36,416 euro, the reduction in real terms was 0.8%, due to the marked contraction of imputed rents (-3.7% with respect to 2017). Equivalised income including imputed rents remained unchanged at constant prices.

**FIGURE 2. POPULATION AT RISK OF POVERTY OR SOCIAL EXCLUSION (EUROPE 2020)**

Years 2004-2019, out of 100 individuals



Since the distribution of household income is asymmetric, the majority of households has an income level lower than the average. Looking at the median value, i.e. the income level that divides households in two groups of equal size, in 2018 half of Italian households had an income not higher than 25,716 euros (2,143 euros per month), 1.1% higher at current prices compared to 2017 (25,091 euro), but virtually unchanged at constant prices.

Households living in the North-east showed the highest median income (29,520 euros), followed by those in the North-west, Centre and South and the Islands, with levels of 95%, 92% and 72%, respectively. Median income levels also varied significantly by household type. Couples with children reached the highest income with 38,464 euros (almost 3,200 euros per month), the vast majority of them being households with two or more income earners. Couples with three or more children earned a median income (38,101 euros) lower than couples with two children (39,077 euros), and just higher than those with just one child (37,470 euros).

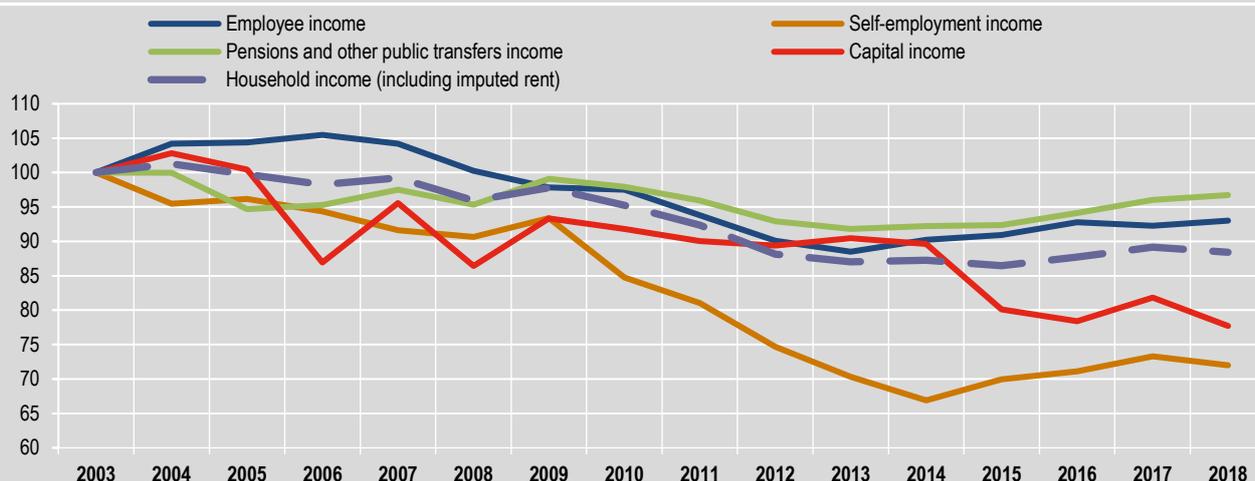
Single-parent households had a median income of 26,329 euros, and half of the elderly living alone had incomes not exceeding 15,392 euros (1,282 per month). Also couples without children showed a lower median income where their reference person was an elder (26,441 euros vs 32,566 euros for younger couples without children). Median income of households with foreigners was lower by 5,400 euros compared to that of households with all Italian members. These differences increased when moving from North to the South, where median income of households with at least one foreigner was 61.6% of that of Italian-only households.

### Income from employment increased, while that from self-employment lowered

In 2018 real household income components showed a heterogeneous dynamics: while income from employment and income from pensions and/or social transfers grew respectively by 0.8% and 0.7%, household income from self-employment decreased by 1.8%, thus interrupting that recovery started in 2015. Household income from capital decreased by 5.1%, due to the reduction of imputed rents.

Total real losses compared to 2007 remained much larger for household income from self-employment (-21.4%) than that of income from employment (-10.7%) or from pensions and social transfers (-0.8%). Capital incomes showed a total loss of 18.7%, mostly accounted for by the negative dynamics of imputed rents (-21.0% in real terms from 2007).

**FIGURE 3. HOUSEHOLD NET INCOME INCLUDING IMPUTED RENT AT CONSTANT PRICES BY MAIN INCOME SOURCES.** Incomes 2003-2018, mean values (Base 2003=100)



## INEQUALITY

### Income of the richest quintile 6 times higher than that of the poorest one

In order to measure inequality in the distribution of income, individuals can be sorted from the lowest to the highest equivalent income and classified into five groups (quintiles). The first quintile comprises the 20% of individuals with the lowest income, the second those with low-medium income and so on until the last quintile, including the 20% of individuals with the highest income. The ratio between total equivalised income received by the richest 20% of the population and that received by the 20% of the population with the lowest income (known as s80/s20 ratio) provides a simple and clear measure of inequality.

With reference to the distribution of equivalised net income (excluding imputed rents), in 2018 this ratio was 6.0, stable in comparison to 2017 (6.1). Including imputed rents in income the ratio falls to 5.1, because of lower dispersion of this additional component compared to other income. Income inequality was higher in the South and Islands, where the richest 20% of the population received a total income (including imputed rents) 5.8 times that of the lowest 20%, whereas the ratio was lowest in the North-east (3.9), followed by the Centre (4.4) and the North-west (4.5). Geographical breakdown shows how income inequality was negatively correlated with income levels, including imputed rents: in the South and Islands, where household income was at its lowest with an average of 29,876 euros (compared to an average value for Italy of 36,416 euros), inequality as measured by the s80/s20 ratio was at its highest, while in the North-east (where average household income was 40,355 euros vs. 41,019 euros in 2017) it was at its lowest.

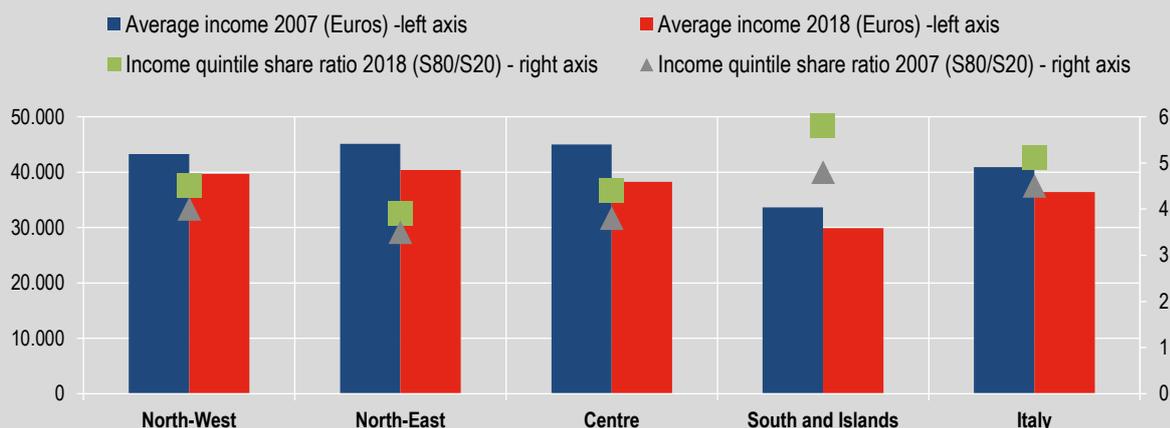
Compared to 2007, the reduction in real household incomes including imputed rents was accompanied by an increase in income inequality (the s80/s20 increased from 4.5 in 2007 to 5.1 in 2018). This dynamics was particularly evident in the Centre, where the average household income decreased by 15.1% and the s80/s20 ratio went from 3.8 to 4.4. However, the largest increase in income inequality was observed in the South and Islands (s80/s20 from 4.8 to 5.8).

### Income inequality higher in Italy than in other major Eu countries

Gini coefficient is one of the key measures used in the European context to assess income inequality among individuals. On the basis of net income without imputed and in-kind components (a measure harmonised at the European level), in 2018 the estimated value of the Gini coefficient for Italy was 0.328, slightly decreasing compared to 2017 (0.334) and higher compared to other major European countries (it was 0.292 in France and 0.297 in Germany). In the ranking of the Eu28 countries for which the Gini coefficient is available (27 countries, from the lowest to the highest coefficient), Italy was in the 19<sup>th</sup> position (gaining two positions compared to 2017, when it ranked 21<sup>st</sup>).

In Italy, the Gini coefficient was higher in the South and Islands (0.350) compared to the Centre (0.311), the North-west (0.310) and the North-east (0.282).

**FIGURE 4. AVERAGE ANNUAL HOUSEHOLD NET INCOME INCLUDING IMPUTED RENT AT CONSTANT PRICES AND INCOME QUINTILE SHARE RATIO INCLUDING IMPUTED RENTS (S80/S20), BY GEOGRAPHICAL AREA.** Income 2007-2018, mean values in euros (Base 2018=100) and income ratio



## TAX BURDEN OF HOUSEHOLDS

### Lower average tax rates for households with children

In Italy, income taxation is on an individual basis with deductions partially accounted for by family circumstances. The effects of the taxation on households' material well-being and living conditions, however, are analyzed based on the income of all household members.

In 2018, the average tax rate for households was stable in comparison to the four previous years (19.5%). Thanks to child tax credits and family allowances, the higher the number of children in one-earner households the higher tax benefits they receive.

The lowest average tax rates were, therefore, recorded among couples with one or more minor children (13.7%), who went back to the 2016 level (13.8%) after the surge in 2017 (15.8%), and among single-parent households (16.7%). Among one-earner households, couples with all adult children, who were among the most advantaged in 2017 (16.1%), showed a strong growth in tax burden, one point above the national figure (20.3%). On the other hand, couples without children with a reference person over the age of 65 continued to be the most penalized (average rate of 21.2%), due to greater ability to generate income (€ 28,860 euro). In addition to higher deductions for dependents, households with children also benefited from (tax-free) family allowances, which increased as the number of family members increased. However, the relative tax advantage decreased as the level of household income rose, since family allowances and deductions decreased with increasing individual/family income.

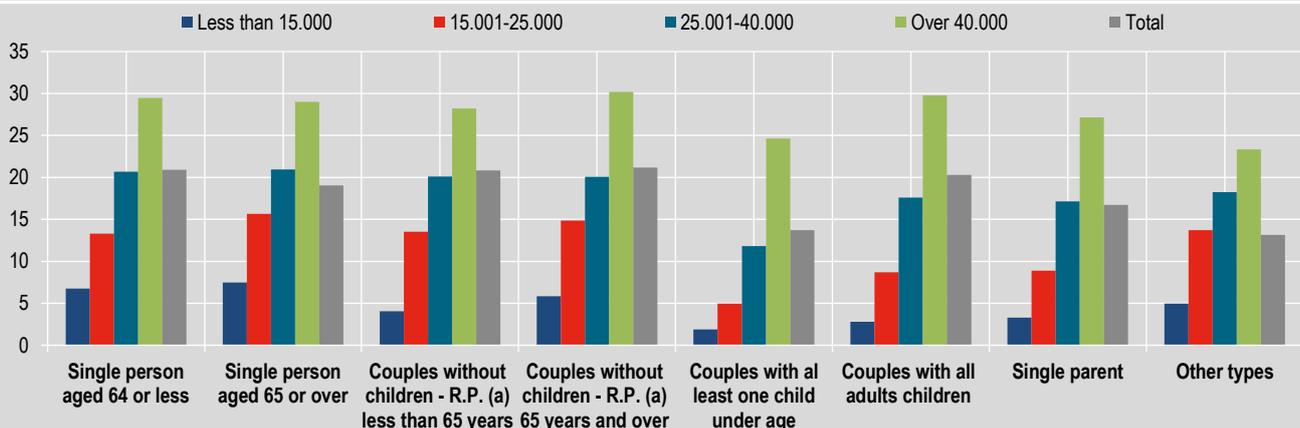
Since the Italian tax system generally does not provide for monetary transfers to people lying below the no-tax area, the so-called "incapienti" (tax credits, indeed, can only be granted to taxpayers with a non-zero tax liability), it happened that households with dependent children in the income group 0-15 thousand euros often failed to further reduce their tax burden. The only exception to the rule was the Irpef bonus (Renzi) which granted a refundable tax credit.

Regardless of the number of earners in the household, personal income tax was heaviest on singles under 65 and couples without children (whatever the age of the reference person), both with average tax rates over 21%. The high incidence of taxation on these households is mainly explained by the absence of deductions for dependent family members.

The tax burden was on average relatively lower for households living in the South and Islands than for the rest of the country (16.9% against 19.7% in the North-east, 20.3% in the Centre and 20.8% in the North-west), as a results of the higher number of dependent members (higher deductions) and the lower average income level throughout the distribution.

**FIGURE 5. AVERAGE TAX RATE OF ONE-EARNER HOUSEHOLDS BY TYPE AND TAXABLE INCOME GROUP.**

Income 2018, percentage values and in euros



(a) R.P.: reference person.

## THE LABOUR COST

### Tax wedge remained stable above 45%

The labour cost, given by the sum of the gross wages of employees and the social insurance contributions paid by employers, reached an average value of 32,130 euros in 2018. The net salary that workers actually take home represents, as in 2017, just over half of total labour costs (54.4%, equal to 17,486 euros). The remaining part (the tax and contribution wedge, i.e. the sum of the employee's personal income tax and the employee's and employer's social security contributions) accounted for 45.6%, or €14,643.

Employers' social contributions continued to represent the highest component of labour costs (25.0%) while the remaining 20.6% was paid by workers in the form of personal income taxes (14.0%) and social contributions (6.6%). The labour cost for women and their net salary represented about 74% and 77% of that of male employees, respectively. The tax wedge for female wage earners represented 44.1% of the labour cost (46.5% for male earners), similar to what registered in 2017.

As expected, the tax and contribution wedge increased with higher age and qualifications allowing access to higher paying jobs. In fact, the tax wedge for managers peaked at 53.3% of the labour cost while for blue-collar workers it was 43.6%.

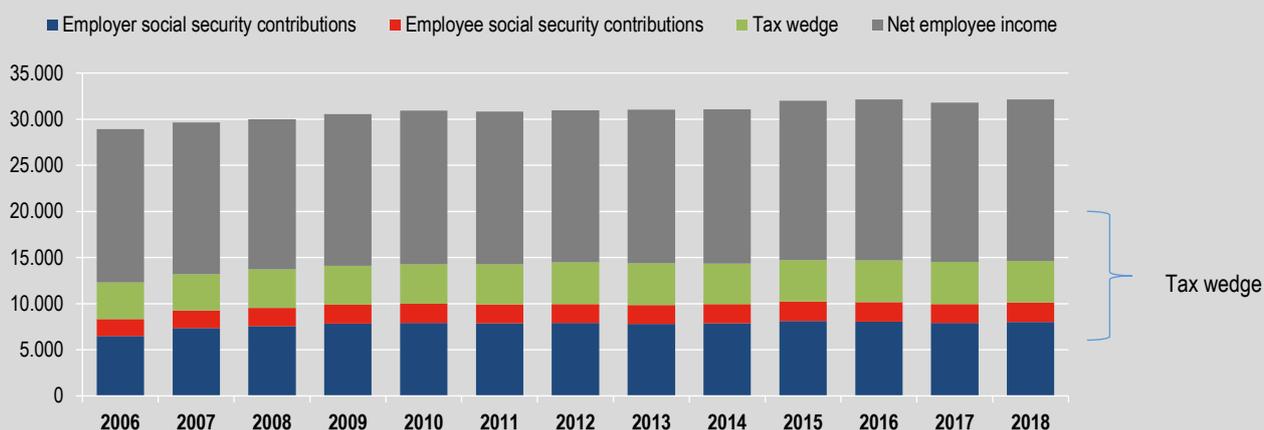
The tax and contribution wedge was clearly higher for those with a permanent employment contract (46.3% against 41.1% for those with a temporary contract) and full-time working hours (46.3% compared to 41.3% for those working less than 30 hours a week); it stabilized at 45.9% for Italian citizens against 42.5% for non-Italian citizens. At a territorial level, the wedge was highest in the North-west (46.6%) and lowest in the South and Islands (43.7%), where average incomes were lower.

### Wide gender gap also in self-employment income

Individual income from self-employment, gross of taxes and social contributions and net of work vouchers, was unchanged compared to 2017 in terms of amount. However, the reduction in the number of recipients of this kind of income resulted in a 4% increase in the average value compared to the previous year (25,831 euros). The growth was due to increases in the South and Islands (+7.7%), in the Centre (+5.2%) and the North-west (+3.7%), resulting in higher taxes in these areas. Social security contributions, which for the self-employed are partly decoupled from income, increased in the Centre (+7.4%) and in the North-east (+5.5%).

After tax and social security contributions, self-employment disposable income represented 67.2% of initial income: taxes accounted for 16.6% of gross income and social contributions, aimed at obtaining social security and welfare benefits, for 16.2%, substantially confirming the situation of 2017.

**FIGURE 6. LABOUR COST COMPONENTS.** Incomes 2006-2018, average in euros (a)



(a) Employee income recipients

Gender differences were also evident for self-employment income. The gross incomes of female workers averaged 21,437 euros against 28,351 euros of male recipients. Although female workers accounted for over a third of the self-employed (36.4%), they produced an overall income of just over 30% of the total.

Territorial differences were also marked: as in the case of employees, in the North-west self-employment income (29,297 euros), and therefore taxation and social contributions were on average higher (in the South and Islands they amounted to 19,531 euros, 67.6% of self-employment income in the North-west).

### Increasing tax burden for entrepreneurs and freelancers

The incidence of direct taxes on self-employment income, net of vouchers, remained substantially unchanged compared to 2017 (19.9% of gross income, net of social contributions), also including the estimated regional tax on productive activities (Irap). Between 2017 and 2018, the tax burden increased for entrepreneurs and freelancers (+ 1.7%), and decreased for artisans (-1.5%).

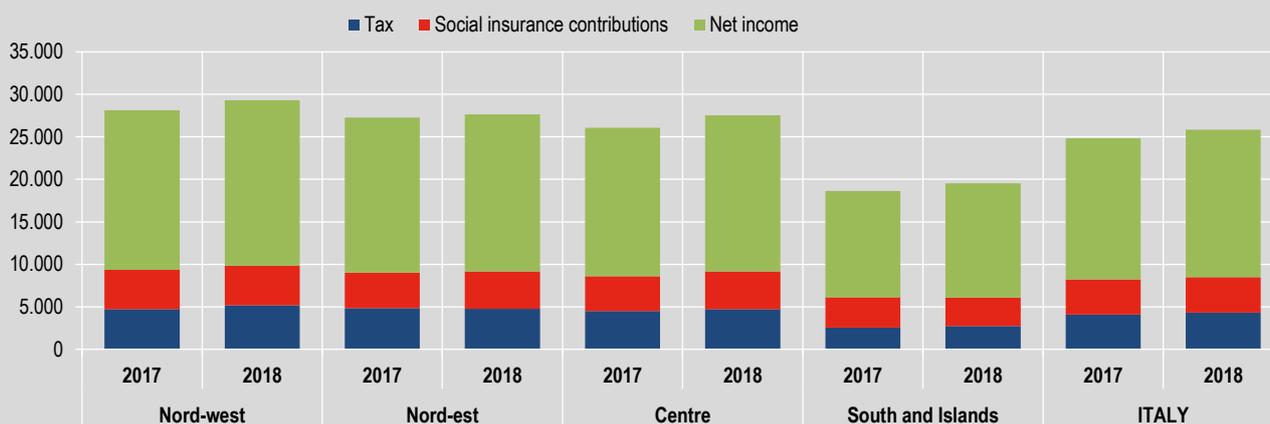
In 2018, tax incidence was higher than the national average in the North-west (21.0%) - and not in the North-east as in 2017 - and among male workers (20.4%). It increased with the worker's age: from 13.6% for those under 35 to 28.4% for those over 64. There was also a significant gap between those with a University degree (23.6%) and those with a lower qualification (16.8% for those with lower secondary education).

For self-employed with employees, the tax burden was almost 3 percentage points higher than for those without employees (20.6% against 17.8%); for those who worked full-time (30 hours or more per week), the tax rate was 2 percentage points higher than for those who worked part-time (19.5% against 17.6%).

As regards professional activity, the tax burden was lower for artisans and farmers (about 17%), and reached 22.3% for business owners, freelancers and self-employed workers. Finally, the incidence of taxes was lower for foreign self-employed workers (-3.2 percentage points compared to the Italian self-employed).

**FIGURE 7. COMPONENTS OF GROSS SELF-EMPLOYMENT INCOME BY GEOGRAPHICAL AREAS.**

Incomes 2017-2018, average in euros (a)



(a) Before taxes (including Irap) and social contributions

# Glossary

**At risk of poverty or social exclusion rate (abbreviated as AROPE) (Europe 2020):** it refers to the situation of people either at risk of poverty, or severely materially deprived or living in a household with a very low work intensity. The AROPE rate, that is the share of the total population at risk of poverty or social exclusion, is the headline indicator to monitor the Eu 2020 Strategy poverty target.

**At-risk-of-poverty rate (Europe 2020):** it is the share of people with an equivalised net income (after social transfers) below the at-risk-of-poverty threshold, which is set at 60% of the national median equivalised net income after social transfers. The net income does not include imputed rent, non-cash employee income (other than company car) and income from household production of goods for own consumption. In 2019 the at-risk-of-poverty threshold (computed on 2018 incomes) is 10,229 euros per year.

**Capital income:** it is defined as the income received less expenses occurring during the income reference period by the owner of a financial asset or a tangible non-produced asset (land) in return for providing funds to, or putting the tangible non-produced asset at the disposal of, another institutional unit. It includes interests (from assets such as bank accounts, certificates of deposit, bonds, etc.), dividends, profits from capital investment in an unincorporated business, income from rental of a property or land, pensions received from individual private plans, with or without imputed rent.

**Employee income:** it is defined as the total remuneration, in cash or in kind, payable by an employer to an employee in return for work done by the latter during the income reference period. It includes also the market value of the company car provided for private use as well, luncheon vouchers and other non-cash fringe-benefits.

**Employer social insurance contributions:** they include the employer's effective contributions and the charge for the provision for severance pay. From 2011 the contributions to be paid by the employers to the free-lance workers (coordinated and continuous collaborators and project collaborators) are not included.

**Equivalised income:** it is the total household income, divided by the number of household members transformed into equivalised adults; household members are equivalised or made equivalent by weighting each member according to their age, using the so-called modified OECD equivalence scale. This scale gives the following weight to household members: 1.0 to the first adult; 0.5 to the second and each subsequent person aged 14 and over; 0.3 to each child aged under 14. All household members are given the same individual equivalised income.

**Europe 2020 Strategy:** the European Union ten years strategy for growth and jobs launched in 2010 to create the conditions for smart, sustainable and inclusive growth. The Eu has agreed on five quantitative targets to be achieved by the end of 2020 concerning employment, research and development, climate and energy, education, social inclusion and poverty reduction.

**Gini coefficient:** it is an index to measure the level of income inequality and it varies between 0 and 1. The extreme value of 0 expresses perfect income equality where everyone has the same income, while the extreme value of 1 expresses full inequality where only one person has all the income. In this note, the Gini coefficient is applied to the individual distribution of the equivalised net income, excluding imputed rent, non-cash employee income (other than company car), income from household production of goods for own consumption.

**Gross wage:** sum of net employee income, without figurative and in-kind components, personal income tax and social insurance contributions paid by the employee.

**Household gross income net of social insurance contributions:** sum of net household income, without figurative and in-kind components, and personal income tax paid by household members.

**Household net income:** it includes for all the household members the employee income (including fringe benefits, such as the private use of company car, luncheon vouchers, health care reimbursements, school or nursery care, holiday bonuses, goods produced by the company, etc.), the income from self-employment, the financial and real capital income, the pensions and other public and private transfers received, the monetary value of goods produced for own consumption minus cash transfers to other households. These incomes are net of taxes on income, taxes on wealth and social insurance contributions for employee and self-employed workers. It represents an more extensive definition of household net income used at European level. The household net income reported in this note is not comparable with the Family sector disposable income of the National Accounts (obtained by adding to primary incomes the secondary redistribution of income and also including an estimate of the "non-observed" economy).

**Household net income without figurative and in-kind components:** it represents the definition of household net income used at European level. Compared to the household net income, it does not include figurative components such as imputed rent and in-kind components such as the monetary value of goods produced for own consumption and the fringe benefits (luncheon vouchers, health care reimbursements, school or nursery care, holiday bonuses, goods produced by the company, etc.) other than the company car (i.e. the private use of

company car is included in this income definition). In this note, this income definition is used for the at-risk of poverty rate, for the Gini coefficient and for gross incomes.

**Imputed rent:** it is a non-monetary income component pertaining households living in their main accommodation as owner-occupiers, renters-free or renters at lower price (compared to the market-price rent). It represents the cost (or the additional cost) that shall be paid for a similar dwelling as the one occupied if rented it at a market-price. Costs for heating, water, electricity, etc. are excluded.

**Income at constant prices:** it is calculated by deflating the income at current values using the annual average value of the Harmonised Index of consumer prices for the European Union countries (HICP). This index is preferable compared to the Consumer price Index for the whole nation (NIC), since it refers to monetary expenditures for final consumption exclusively by households and ensures a comparable European inflation measure.

**Income quintile share ratio (S80/S20):** it is a measure of the inequality of income distribution. It is calculated as the ratio of total income received by the 20 % of the population with the highest income (the top quintile) to that received by the 20 % of the population with the lowest income (the bottom quintile). All incomes are compiled as equivalised incomes.

**Individual gross income net of social insurance contributions:** it includes gross income from employees self-employed, pensions and non-pension transfers, such as unemployment benefits, partial unemployment benefits (cig), vocational training allowances, severance and termination payments for employees, financial and real capital income. It corresponds to the sum of net personal income (without figurative and in-kind components) and personal income tax by type of source.

**Irap:** the regional tax on production activities, established by Legislative Decree issued on 15 December 1997.

**Labour costs:** sum of gross wages and social insurance contributions paid by the employer.

**Median household income:** is the value of household income that divides the frequency distribution into two equal parts (50% of households have a household income level lower than or equal to the median, 50% a higher level). Since household income has an asymmetric distribution and is more concentrated in the lower values of the scale, the median value is always below the mean value.

**Other income components:** they include capital incomes, regular inter-household cash transfers received or paid, incomes received by people aged under 16, incomes from household production of goods for own consumption and every other incomes not deriving from work or social transfers.

**Pensions and other public transfers:** pensions are periodic cash payments aimed to maintain the income of the beneficiary and to provide protection against risks linked to old age, loss of income, inadequate income, lack of independence in carrying out daily tasks, reduced participation in social life, and so on. They include i) old-age benefits that provide a replacement income when the person retires from the labour market or reaches a given age or years of contribution; ii) disability benefits to support the income in case of a disability which impairs the beneficiary's ability to work beyond a minimum level, when the beneficiary is below the standard retirement age; iii) survivors' benefits that provide a temporary or permanent income to people below the retirement age who have suffered from the loss of another related household member (for example their spouse). Other public transfers include full and partial unemployment benefits ("Aspi". "Naspi". "Cassa integrazione guadagni"), mobility and resettlement benefits; severance and termination payments; education related allowances; family and children related allowances; income support schemes for household and individuals at risk of social exclusion (minimum income, Social card).

**Personal income tax:** sum of direct taxes (national income tax, regional and municipal tax, substitute tax on financial assets and income tax with separate taxation). For employee income, retirement and unemployment income the personal income tax corresponds to the withholding tax (according to the Eurostat definition of gross income), while for self-employment it corresponds to the net tax, because the accounts and withholding tax on self-employment, contrarily to the employee income and retirement income, may also differ significantly from the final tax paid. The self-employment tax includes a portion of IRAP: the regional tax on productive activities is estimated by applying the IRAP tax rate to the part of the tax base of the independent taxpayer that corresponds to the taxable income. Being calculated on the taxable income, IRAP is, for this part, similar to a direct tax.

**Self-employment income:** it is the income received by individuals, for themselves or in respect of their family members, as a result of their current or former involvement in self-employment jobs. Self-employment jobs are those jobs where the remuneration is directly dependent upon the profits (or the potential for profits) derived from the goods and services produced (where own consumption is considered to be part of profits). It includes incomes deriving from employer-coordinated freelance work ("collaborazioni coordinate e continuative – co.co.co" or "collaborazioni coordinate a progetto – co.co.pro."), royalties earned on writing inventions and income derived from the so-called vouchers for occasional work (unless otherwise specified).

**Severe material deprivation rate (Europe 2020):** it is a measure of the inability to afford some items considered by most people desirable or even necessary to lead an adequate life. It is the share of the population that cannot afford at least four of the following nine items:

1. to pay their rent, mortgage or utility bills;
2. to keep their home adequately warm;
3. to face unexpected expenses;
4. to eat meat or proteins regularly;
5. to go on a week holiday;
6. a television set;
7. a washing machine;
8. a car;
9. a telephone.

**Social contributions:** include mandatory paid contributions for social security and welfare benefits (sickness, disability, job-related diseases or accidents at work, old age, maternity), charged to the employee, self-employed, the free-lance worker (coordinated and continuous collaborator and project collaborator) and the employer. Figurative contributions are not estimated in the Eu-Silc survey.

**Social contributions of self-employed workers:** include social contributions by self-employed workers and contributions to be paid by free-lance workers and their employers and from 2017 also the compulsory social insurance contributions for occasional work (the so-called vouchers).

**Tax wedge:** sum of personal tax on income, social contributions of the employee and contributions to be paid by the employer.

**Very low work intensity (Europe 2020):** share of people living in a household having a work intensity below a threshold set at 0.20. The work intensity of a household is the ratio of the total number of months that all working-age household members have worked during the income reference year and the total number of months the same household members theoretically could have worked in the same period. A working-age person is a person aged 18-59 years with the exclusion of students in the age group between 18 and 24 years. Households composed only of children, of students aged less than 25 and/or individuals aged 60 or more are completely excluded from the indicator calculation.

# Methodological Note

## Objective and reference framework

The Eu-Silc (Statistics on Income and Living Conditions. Regulation of the European Parliament. no. 1177/2003) is one of the main sources of data for periodic reports on the social situation of the European Union and the spread of the risk of poverty in member countries. Eu-Silc is a multi-purpose instrument which focuses mainly on income and social exclusion, with a particular attention on aspects of material deprivation.

In Italy the Eu-Silc data are collected yearly since 2004. Although the Eu-Silc Regulation requires national level estimates, the Italian survey allows for reliable estimates at regional level as well.

## Reference population and survey units

The reference population is made up of all the households residing in Italy at the time of the interview and their members. Persons living in institutions are excluded.

A household is a group of people who habitually live in the same dwelling and are related through marriage, kinship, affinity, adoption, patronage and affection. All family members are detected but only people aged 16 or over are interviewed.

## Process and methodologies

The survey is conducted through household and personal interviews.

Since 2011, interviews have been carried out by a private company according to a CAPI (Computer Assisted Personal Interview) technique instead of the PAPI (Paper and Pencil Interview) previously used. Since 2015 a share of the interviews is carried out by CATI (Computer Assisted Telephone Interview) technique.

The sample design is based on a two-stage scheme (municipalities and households), where the primary sample units – municipalities – are stratified by population size within each region. Rotational design is used for households; the whole sample is composed of four rotational groups, each group is included in the sample for four waves of the survey. Each year one fourth of the sample is renewed, replacing the group entered in the sample four years before, while the remaining three fourths are made of households and individuals selected one, two or three years before, interviewed respectively for the second, third or fourth time. The overall sample is statistical representative of the population residing in Italy and, in 2019, it amounts to 20,831 households (43,400 individuals), residing in about 636 municipalities.

Data collection is carried out through an electronic questionnaire, structured in three parts:

- a) General form to collect demographic information related to each household member (sex, date and place of birth, citizenship etc.) and some information for each household member aged less than 16 years (type of school attended, formal and informal childcare etc.);
- b) Household questionnaire to collect information about housing conditions, housing expenses, economic situation, material deprivation, household income components;
- c) Personal questionnaire for each household member aged at least 16 years to collect information on education, health, current or previous labour, income by detailed components (employee, self-employment, pensions and other social transfers, financial and real capital, private transfers).

Income data collected by interviews are integrated with administrative register data. A micro-simulation model allows to obtain further gross income values. The integrated use of data from administrative sources and the micro-simulation model let estimate taxes and social contributions paid by individuals that, added to the net income, constitute gross income.

## References

The survey estimates can also be consulted in the I.Stat data warehouse at <http://dati.istat.it/> (topic: "Household Economic conditions and inequalities", topics "Income", "Poverty", "Housing conditions").

In compliance with the European Regulation n. 1177/2003, the survey data are transmitted annually to Eurostat. The main indicators, stored in the Eurostat database, can be consulted at the link: <http://ec.europa.eu/eurostat/data/database> (Theme "Population and social conditions", topic "Income and living conditions").

Summary data on household income and economic conditions are also published in the volume *Noi Italia*, in the Italian statistical yearbook and in the *Bes Report: equitable and sustainable well-being in Italy*.

For further information it is possible to access the Istat website at: <http://www.istat.it/it/archivio/5663>.

## Confidence intervals

When a sample rather than the entire population is observed, the computed estimates are affected by sampling error. That error can be measured as standard error or relative error, i.e. the standard error divided by the mean estimate or the coefficient of variation (CV).

Based on these values, confidence intervals, including the real unknown value of the parameter to be estimated with a pre-fixed probability level, can be derived. The confidence interval is obtained adding and subtracting from the point estimate the standard error multiplied by a coefficient dependent on the confidence level chosen. Using the common confidence level of 0.95 ( $\alpha=0.05$ ), the coefficient is 1.96.

In the following table are reported relative errors (CV), standard errors and confidence intervals of the estimates of the main indicators published in this note.

## RELATIVE ERRORS, STANDARD ERRORS AND CONFIDENCE INTERVALS OF THE MAIN INDICATORS ESTIMATES. Year 2019

	Estimate (a)	Relative error (CV) (b)	Standard error (s.e.) (c)=(a)*(b)	Confidence interval (probability level=0.95)	
				Lower bound (a)-1.96*(c)	Upper bound (a)+1.96*(c)
Population at risk of poverty or social exclusion (out of 100 individuals)	25.6	0.01818	0.46531	24.7	26.5
Population at risk of poverty (out of 100 individuals)	20.1	0.02204	0.44205	19.2	20.9
Severe material deprivation (out of 100 individuals)	7.4	0.06402	0.47314	6.5	8.3
Very low working intensity (out of 100 eligible individuals) (a)	10.0	0.04561	0.45445	9.1	10.9
Mean net household income (year 2017, values in euros)					
- Excluding imputed rents	31,641	0.00660	208.91961	31,232	32,050
- Including imputed rents	36,416	0.00592	215.74677	35,993	36,838
S80/S20	6.0	0.02093	0.12579	5.8	6.3
Gini coefficient	32.8	0.01245	0.40893	32.0	33.6
Mean gross household income (year 2017, values in euros)	38,946	0.00748	291.23256	38,375	39,517
Labour cost (year 2017, values in euros)	25,831	0.01738	449.02432	24,951	26,711

(a) This estimate is based on the whole population and not only on individuals aged 18-59 years old.

## Some indicators computation method

The **imputed rent** is estimated by means of an econometric model relating the dwelling characteristics and the market price rent paid by renters, on the market renters subset, through a two stage Heckman procedure, the following model has been estimated:

$$\ln y_i = \beta_0 + \beta_{1k} X_{ki} + \beta_2 T_i + \beta_3 \lambda_i + u_i$$

where  $y_i$  is the paid rent,  $X_{ki}$  is a vector of the dwelling characteristics (type of dwelling, dwelling size, presence of terrace, balcony, garden, lack of enough light) and characteristics of the area where the dwelling is located,  $T_i$  is the tenure seniority,  $\lambda_i$  is the inverse Mill's ratio to correct the sample selection bias (rent is observed only among those paying a market price rent and they could differ in a systematic and not-observable way from the remaining sample) and  $u_i$  is the error term,

In details  $\lambda_i$  is obtained through a probit model with renter status as dependent variable and households characteristics as independent variables (number of household members, number of income recipients, equalised income quintiles and some socio-economic characteristics of the reference person).

The estimated parameters  $\beta_i$ , are used to compute the imputed rent for no-renters households, Seniority is included between regressors, but its effect is depurated (setting the parameter from regression equal to 0) in estimating predicted values for sub-populations other than tenants at a market rate, From that value, interests paid on mortgage, if any, are deducted,

**The Gini coefficient** can be computed through the following formula:

$$\frac{\sum_{i=1}^{n-1} (P_i - Q_i)}{\sum_{i=1}^{n-1} P_i}$$

where  $Q_i$  are the cumulate income shares and  $P_i$  are the cumulate shares in case of equi-distribution.

## For technical and methodological information

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