

Income, living conditions and fiscal burden of households | YEAR 2018

Household net income increased (+2.6%) but inequality did not reduce

In 2017, the average **household net income (31,393 euros per year)** still increased both at current prices (+2.6%) and at constant prices (+1.2%). However, income inequality did not reduce: the total income of the wealthiest households continues to be more than **six times the poorest ones**'.

Even still very high, the share of population **at-risk of poverty or social exclusion** decreased compared to 2017 (from 28.9% to 27.3%) due to a lower incidence of severe material deprivation (-1.6 percentage points), while the share of population at-risk of poverty remained constant at 20.3%.

+1.3%

Growth in household median income

Household median net income was 25,426 euros (2,120 euros per-month)

19.5%

The average tax rate on household income was stable compared to previous year.

45.6%

Mean tax wedge

The labour cost on average was 31,783 euros per year. The employees average net wage was 17,277 euros.

www.istat.it

UFFICIO STAMPA
tel. +39 06 4673.2243/4
ufficiostampa@istat.it

CENTRO DIFFUSIONE DATI
tel. +39 06 4673.3102



HOUSEHOLD INCOME

Ongoing growth in household income

The "Income and living conditions" (Eu-Silc) sample survey in 2018 produced several indicators of the economic households conditions, data on households net incomes and information on working conditions referred to 2017.

In 2017, household average net income (excluding imputed rents) was 31,393 euros, about 2,616 euros per month. The growth in household income was higher compared to the previous year at current prices (+2.6% from +2.0%) but lower at constant prices (+1.2% from +2.1%). The income concept we refer to, does include some components not considered in the European harmonized definition of household income, 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 2017 the household average income at constant prices (excluding imputed rents) grew more in the Central Italy (+1.5%) and in the North-West (+1.4%) than in the South (+1.1%) and in the North-East (+0.6%). The largest increases were observed for couples without children (+3.2%) and for single person households (+2.6%), followed by couples with children (+1.0%); on the contrary, household income at current prices decreased for single parent households (-1.1%). Despite the growth observed in 2017, overall income contracted compared to 2007 (the year before the crisis), with an average loss of 8.8% for household income and of 6.8% for equivalised income (considering economies of scale within the household and allowing income comparisons between households of different size and composition). As regards geographical areas, total reduction in household income amounted to 11.9% in the South, 11.0% in the Centre, 6.7% in the North-West and 6.0% in the North-East. Looking at different household types, the losses of household real income compared to 2007 were higher for large households (-8.2%, -11.4% and -14.0% respectively for households with three, four and five or more members), whereas the losses were clearly lower for household with two members (-1.8%); real incomes of single person households slightly increased (+0.7%) during the same period.

In order to compare the economic conditions of owners and tenants households (approximately one fifth of all households), imputed rents of owner-occupiers, life tenants and free-rent tenants should be included in the calculation of the disposal income.

In 2017, household income including imputed rents was 36,293 euro; the increase in real terms was 1.7%, larger than the increase of household income without imputed rents, for the strong increase of this component (+4.8% compared to 2016). Equivalised income including imputed rents grew by 1.8% at constant prices.

INCOME AND LIVING CONDITIONS: KEY FIGURES

Years 2017-2018, mean values in Euros, out of 100 individuals, percentage values

| INDICATOR | 2017 | | | | | 2018 | | | | |
|--|------------|------------|--------|-------------------|--------|------------|------------|--------|-------------------|--------|
| | North-West | North-East | Centre | South and Islands | Italy | North-West | North-East | Centre | South and Islands | Italy |
| Household net income (excluding imputed rent)* | 33,268 | 34,678 | 32,006 | 24,792 | 30,595 | 34,211 | 35,386 | 32,945 | 25,415 | 31,393 |
| Risk of poverty or social exclusion | 20.7 | 16.1 | 25.3 | 44.4 | 28.9 | 16.8 | 14.6 | 23.1 | 45.0 | 27.3 |
| Risk of poverty | 13.7 | 10.2 | 16.6 | 33.1 | 20.3 | 12.2 | 10.5 | 16.3 | 34.4 | 20.3 |
| Average tax rate at households level (*) | 20.87 | 19.78 | 20.54 | 16.25 | 19.41 | 20.86 | 19.88 | 20.55 | 16.41 | 19.47 |
| Labour cost (*) | 36,463 | 34,227 | 33,136 | 25,769 | 32,154 | 36,038 | 34,164 | 32,481 | 25,437 | 31,783 |

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

As 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 dividing households in two groups of equal size, in 2017 half of Italian households had an income not higher than 25,426 euros (2,120 euros per month; +1.3% at current prices but virtually unchanged at constant prices) compared to 2016, when half of all households had an income not higher than 25,091 euro.

Households living in the North-East showed the highest median income (29,785 euros), followed by those in the North-West, Centre and South, with incomes of 93%, 88% e 73% compared to the former group. Median income levels changed widely considering household characteristics. Couples with children had the highest income with 37,189 euros (3,100 euros per month), the vast majority of them being households with two or more income earner (2.2 percipients on average). Couples with three children or more, earned a median income (35,732 euro) lower than for the one of both couples with one child (36,823 euro) and those with two children (37,821 euro).

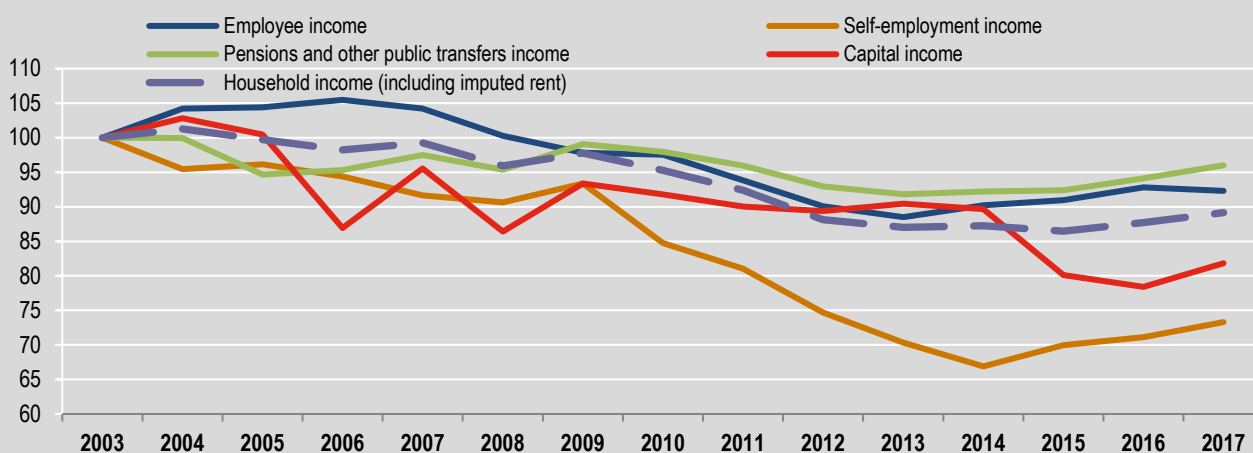
Single-parent households had a median income of 26,436 euros, lower by approximately 10,750 euros than the one of couples with children. Half of the elderly living alone had incomes not exceeding 15,376 euros (1,281 per month), 2,794 euros less compared to working-age singles (a monthly difference of 230 euros). Also couples without children showed a lower median income if in the household the reference person is an elder (26,015 euros vs 32,551 euros for younger couples without children). Median income of households with foreigners was lower by 6,780 euros compared to that of households with all Italian members. These differences were bigger moving from North to South, where median income of households with foreigners was 58.0% of the one of households with all Italians.

Income from self-employment and pension increased

In 2017 household real income displayed different dynamics by type of source: on one hand income from self-employment and income from pensions and/or social transfers grew respectively by 3.1% and 2.0%, on the other hand income from compensation of employees decreased by 0.5% (the first reduction from 2013). Capital income grew by 4.4% thanks to the increase of imputed rents.

The overall real loss compared to 2007 was still quite larger for household incomes from self-employment (-20.0%) than for incomes from compensation of employees (-11.4%) or for income from pensions and social transfers (-1.5%). Capital incomes showed a total loss of 14.3%, fully explained by the negative dynamics of imputed rents (-18.0% in real terms from 2007).

FIGURE 1. HOUSEHOLD NET INCOME INCLUDING IMPUTED RENT AT CONSTANT PRICES BY MAIN INCOME SOURCES. Years 2003-2017, mean values (Base 2003=100)



INEQUALITY

Income of the richest quintile was 6.1 times larger than that of the poorest one

To measure inequality in income it is possible to sort individuals by equivalised income from the lowest to the highest, dividing them in five groups of equal size (quintiles). The first quintile contains the 20% of individuals with the lowest income, the second contains 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 the one received by the poorest 20% (s80/s20 ratio) provides a simple and clear measure of inequality.

The distribution of equivalised income (excluding imputed rents) in 2017 was equal to 6.1. The inclusion of imputed rents makes this ratio lower (5.2), due to the lower dispersion of this income component compared to the others. Income inequality was higher in the South, where the richest 20% of the population obtained a total income (including imputed rents) 5.7 times the one of the lowest 20%, whereas the ratio was lowest in the North-East (4.0), showing a lesser degree of income inequality in that geographical area, followed by the North-West (4.5) and the Centre (4.8). Geographical breakdown shows how income inequality was inversely correlated with household average income with imputed rents: in the South, where household income was at its lowest with an average of 29,398 euros (compared to an average value for Italy of 36,293 euros), inequality as measured by the s80/s20 ratio was at its highest, while in the North-east (where average household income was 41,019 euros) inequality was at its lowest.

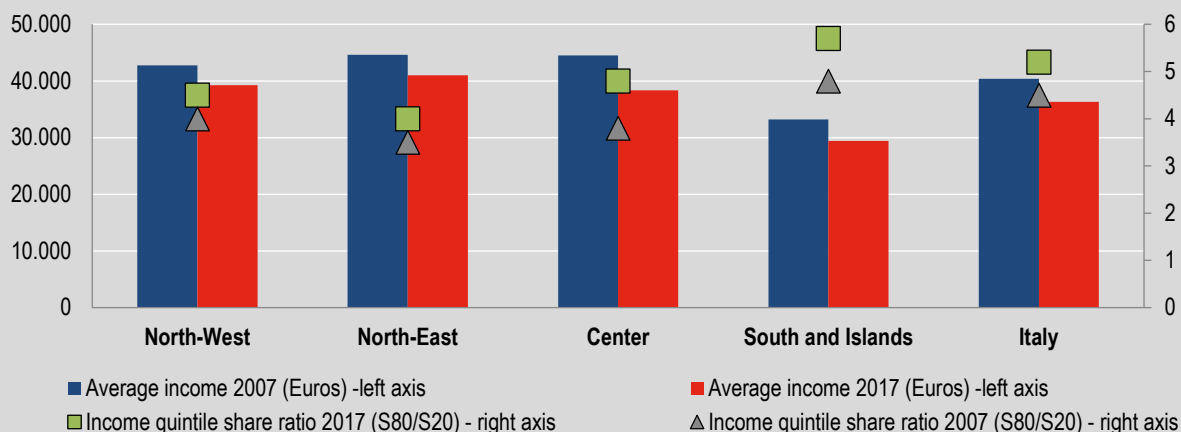
Compared to 2007, the reduction in real household incomes was accompanied by an increase in income inequality (the s80/s20 increased from 4.5 in 2007 to 5.2 in 2017). This dynamics was particularly clear in the Centre, where the average household income decreased by 13.8% and the s80/s20 ratio went from 3.8 to 4.8. However, the increase in income inequality reached its maximum in the South (s80/s20 went from 4.8 to 5.7).

More income inequality in Italy than in other large EU countries

Gini coefficient is one of the head indicators to measure income inequality among individuals in the European context. Using an income measure that excludes imputed rents and in-kind components (a measure harmonised at European level), in 2017 the estimated value for the Gini coefficient was 0.334, stable compared to 2016 and higher compared to other large European countries (it was 0.285 in France and 0.311 in Germany). In the ranking of the UE28 countries (from the lowest to the highest value) for which the Gini coefficient is available (25 countries) Italy was in the 21st position.

In Italy, the Gini coefficient was higher in the South (0.346) compared to the Centre (0.326), the North-West (0.312) and the North-East (0.289).

FIGURE 2. HOUSEHOLD NET INCOME INCLUDING IMPUTED RENT AT CONSTANT PRICES AND INCOME QUINTILE SHARE RATIO INCLUDING IMPUTED RENTS (S80/S20), BY GEOGRAPHICAL AREA. Years 2007-2017, mean values in Euros (Base 2017=100) and income ratio



LIVING CONDITIONS

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

In 2018, 20.3% (a stable value compared to 2017) of the population living in Italy (about 12 million and 230 thousands persons) was at risk of poverty, having in the previous year an equivalised income (without imputed rents and in-kind components) lower than 10.106 euros (842 euros per month). 8.5% of the population (diminished of 10.1% compared to the previous year) was in a state of severe material deprivation, showing at least four out of nine predefined signs of deprivation. 11.3% of the population (slightly down from 11.8% in 2017) lived in households with low work intensity, i.e. households with components aged between 18 and 59 having worked less than a fifth of the available time during the income reference year.

The overall population at risk of poverty or social exclusion, including those individuals in at least one of the three conditions described above, was 27.3% (down from 28.9% in 2017).

In the EU28 the at risk of poverty or social exclusion indicator diminished between 2017 and 2018, down from 22.4% to 21.7%; the AROPE indicator increased only in Estonia (+1%) and in Finland (+0.8%).

In 2018 this indicator was lower in Italy than in Bulgaria (32.8%), Romania (32.5%), Greece (31.8%), Lithuania (28.3%), but much higher than in other countries such as Czech Republic (12.2%), Slovenia (16.2%), France (17.4%), Germany (18.7%) and Spain (26.1%).

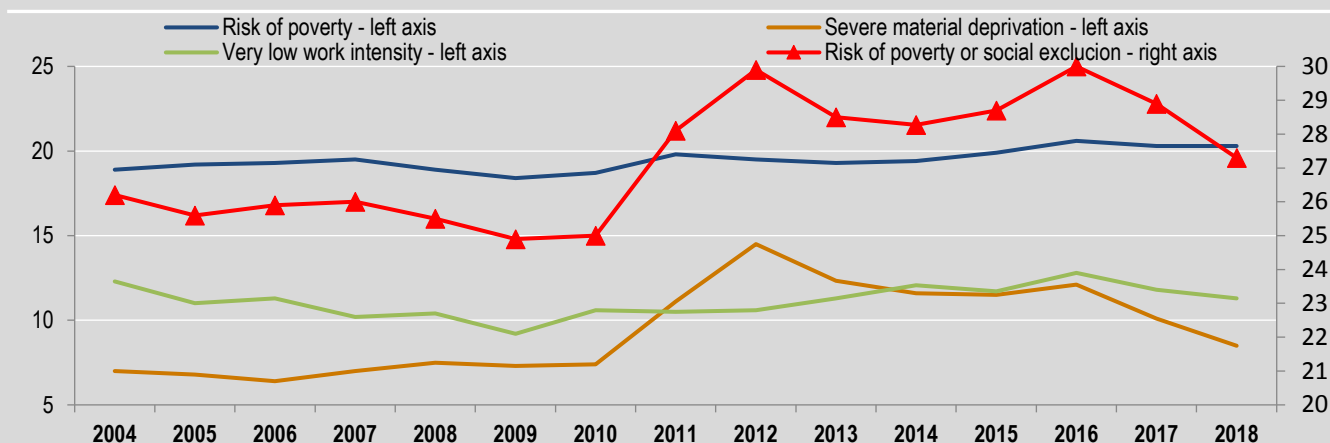
In the South the share of population at risk of poverty increased

In Italy, the South was still the geographical area with the highest percentage of individuals at risk of poverty or social exclusion (45.0%, stable compared to the previous year). However, there was an increase in the risk of poverty from 33.1% in 2017 to 34.4% in 2018 in this area.

The lowest level for the AROPE indicator was 14.6% in the North-East. The reduction in the level of this indicator was particularly noticeable in the North-West (from 20.7% in 2017 to 16.8% in 2018), especially due to the large reduction in the severe material deprivation indicator. A decrease in the AROPE indicator was registered also in the North-East (from 16.1% to 14.6%) and in the Centre (from 25.3% to 23.1%).

FIGURA 3. POPULATION AT RISK OF POVERTY OR SOCIAL EXCLUSION

Years 2004-2018, out of 100 persons (a)



(a) The risk of poverty is calculated on 2017 income and the very low work intensity on the number of months worked by all the household members during 2017.

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

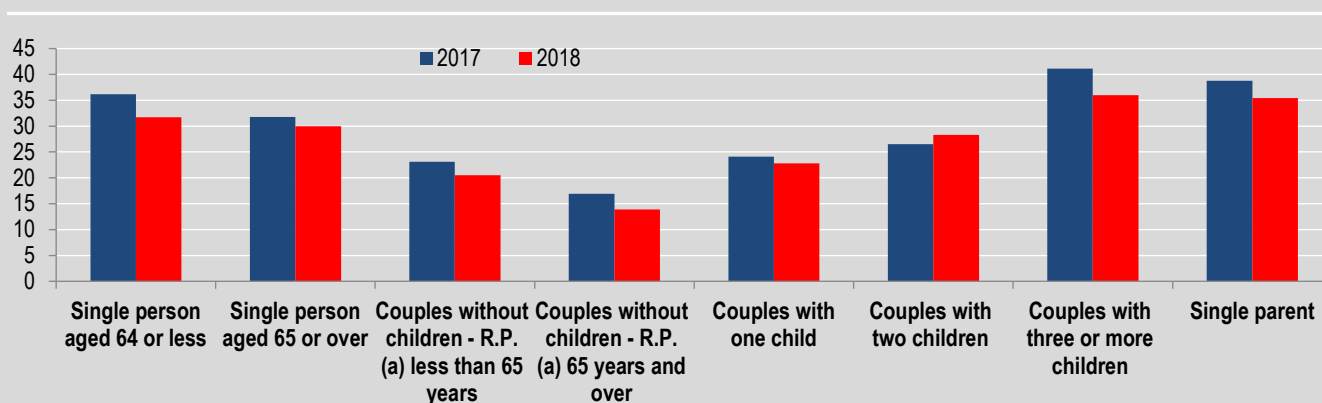
In 2018 the prevalence of the risk of poverty or social exclusion was still higher for individuals living in households with three or more children (36.0%), despite a sensible reduction compare to the previous year (it was 41.1%) and in single-parent households (35.4%; it was 38.8% in 2017). Compared to the previous year, there was a reduction in the AROPE indicator for all household typologies, except for couples with two children (it moved from 26.5% in 2017 to 28.3% in 2018). In particular, clear signs of improvements were observed among individuals living in households with three or more children, single-parent households and single person households, especially when under age 65 (from 36.2% to 31.7%). Such an improvement was associated with a reduction in severe material deprivation for individuals living in single parent households and for single persons, whereas individuals living in households with three or more children experienced a sensible reduction in the risk of poverty (from 33.9% to 30.8%).

Improvements were observed also for individuals living in large households with five or more members (from 42.7% in 2017 to 36.9% in 2018) and in households with three or more children (from 44.5% in 2017 to 38.8%).

The risk of poverty or social exclusion diminished for individuals whose main income source was self-employment (from 32.4% to 28.6%), pensions and public transfers (from 34.3% to 33.0%): the reduction for the former was especially due to the decrease in the risk of poverty whereas for the latter it is due to the decrease in the severe material deprivation. The risk of poverty or social exclusion diminished also for those living in households with only one income earner, even if the indicator still registered a high value (42.5%).

As in 2017, those living in households with at least one foreign member had a risk of poverty or social exclusion much higher (42.7%) than those living in households composed only of Italian citizens (25.5%). The gap was even larger both for the risk of poverty (36.2% vs 18.4% for households with only Italian members) and for severe material deprivation (16.1% vs 7.6%), whereas low-work intensity was more than halved in household with at least one foreign member (6.8% a vs 12.0%).

FIGURE 4. POPULATION AT RISK OF POVERTY OR SOCIAL EXCLUSION BY HOUSEHOLD TYPOLOGY
Years 2017-2018, out of 100 persons



(a) R.P.: reference person.

FISCAL BURDEN OF HOUSEHOLDS

The lowest average tax rate for family with one or more under-age children

In Italy, income taxation is on an individual basis, with deductions that only partially take into account taxpayers' household conditions. For a better understanding of the effects of taxation on material well-being and on the living conditions of the households, it is necessary to assess the tax burden considering the income of all the household members.

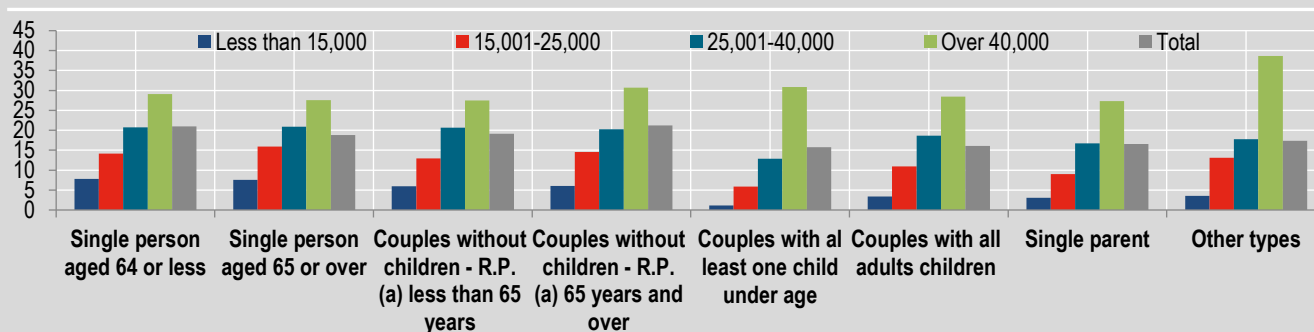
In 2017, the household average tax rate was not significantly different from the previous two years (19.5%). The presence in the household of one or more under-age members (mainly couples with children) allows households supported by a single income earner to obtain tax benefits growing, through deductions, with the number of dependent children. Similarly, lower average rates are recorded among couples with one or more dependent children (15.8%), even if they increased compared to the previous year (13.8%). The tax burden on couples with all adult children (16.1%) and on single-parent households (16.5%) was relatively small. The relatively advantageous treatment enjoyed by families with under-age children is determined not only by the higher deductions for dependent members, but also by the possibility of receiving family allowances (tax-free), increasing with the number of the household members. However, tax benefits tend to shrink as the level of household income increases, thus tax credits and family allowances decrease compared to individual/household income.

Since the Italian tax system does not provide any tax benefits to people lying below the no-tax area because of their low income, defined as "incapienti" (i.e. taxpayers who have no tax as a result of their low income level and who not take advantage of deductions), households with dependent children in the income class 0-15 thousand euros, often failed to further reduce their tax burden. This happens especially if the household income is the result of the sum of more incomes: in the first income class, the probability of being "incapienti" is three times higher in households with two or more income earners than in households with only one income earner.

Single under age 65 and childless couples endured the heaviest tax burden, with an average rate over 21%. Among households with only one income receiver, childless couples over 65 showed the highest tax rate (21.2%), having the highest average gross annual income (around 28,540 euros) and not having deductions for dependent family members.

The tax burden was relatively lower for households living in the South than in the rest of the country (16.4% vs 19.9% in the North-east, 20.5% in the Center and 20.9% in the North-west). As a matter of fact, the southern households displayed a higher number of dependent members (involving deductions) and lower average incomes (also within each income class) compared to households residing in other geographical areas, assuring a more favorable taxation throughout the distribution of household incomes.

FIGURE 5. AVERAGE TAX RATE OF ONE EARNER HOUSEHOLDS BY TYPOLOGY AND TAXABLE INCOME CLASS. Year 2017, percentage values and in euros



(a) R.P.: reference person.

THE LABOUR COST

The tax wedge was still above 45%

The labour cost, the sum of the worker gross wage and the social insurance contributions paid by the employer, showed a reduction in 2017 compared to the previous year (-1.2%), due to the decrease in the employer contributions (-1.8%) with a consequent reduction in the tax wedge (-1.4%). In 2017, the labour cost reached an average of 31,783 euros. The net wage remaining to the worker represents just over half of the total labour cost (54.4% equal to 17,277 euros). The remaining part (45.6%, or 14,506 euros) constitutes the tax wedge, i.e. the sum of personal income taxes and social insurance contributions of employees and employers. As is known, employer social contributions represent the highest component of labour costs (24.8%), while the remaining 20.8% is paid by employees as direct taxes (14.3%) and social contributions (6.5%). At a territorial level, labour cost was higher in the North of the country. Women's labour cost represented about 73% of men's one and the net wage was about 76% of the males' one.

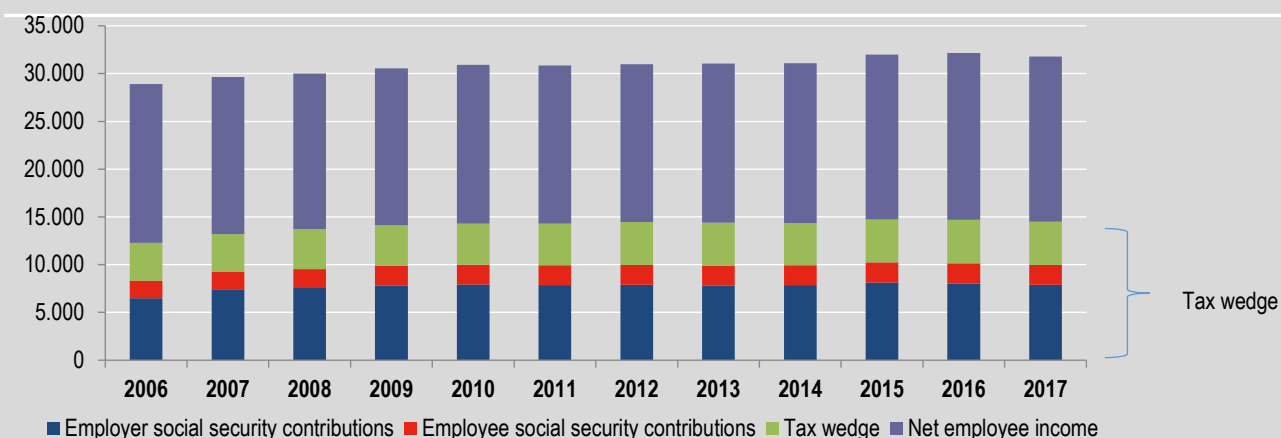
Women's tax wedge represented 44.3% of labour costs (46.5% for male earners). As expected, the tax wedge is higher as age and educational qualifications increase because the latter allows to access to more remunerative jobs. In fact, managers' wedge reached the maximum value of 52.8% of labour costs while for workmen it was 43.6%.

Furthermore, the tax wedge was significantly higher for those having a permanent job (46.4% compared to 41.8% of those having a fixed-term job) and a full-time work (46.4% compared to 40.9% of those working less than 30 hours per week); the tax wedge was 45.9% for Italian citizens versus 42.5% of non Italian ones. At a territorial level, the wedge was higher in the North-West (46.7%) and lower (43.4%) in the South and in the Islands where incomes were lower on average.

Gender differences remained high in self-employment income

In 2017, gross self-employment income (including taxes and social insurance contributions), net of job vouchers (coherently with data published last year) were on average 24,837 euros. Compared to the previous year, in 2017 the gross self-employment income showed an increase in the average value of 6.8%, also due to changes in the tax legislation leading to a greater adhesion to the flat-rate scheme. At a territorial level, the greatest increase in income was in the Centre of the country. The self-employment income net of taxes and social security contributions was 66.9% of the initial income: personal income taxes represented 16.6% of the gross income and social contributions, aimed at achieving the social security and welfare benefits, represented 16.5%.

FIGURE 6. LABOUR COSTS COMPONENTS. Years 2006-2017, average in euros (a)



(a) Employee income recipients

Gender differences in the self-employment income were quite relevant as for the employee income. The female gross self-employment income was on average 20,016 euros, compared to 27,531 euros for males. Although female workers represent over one third of the self-employed workers (35.8%), they produced an overall income of just over a quarter of the total (28.9%).

Territorial differences were also noticeable: as for the dependent employment, in the North-west incomes from self-employment (28,134 euros) and social contributions (4,616 euros) were higher on average.

Tax burden lower for farmers, higher for entrepreneurs and freelancers

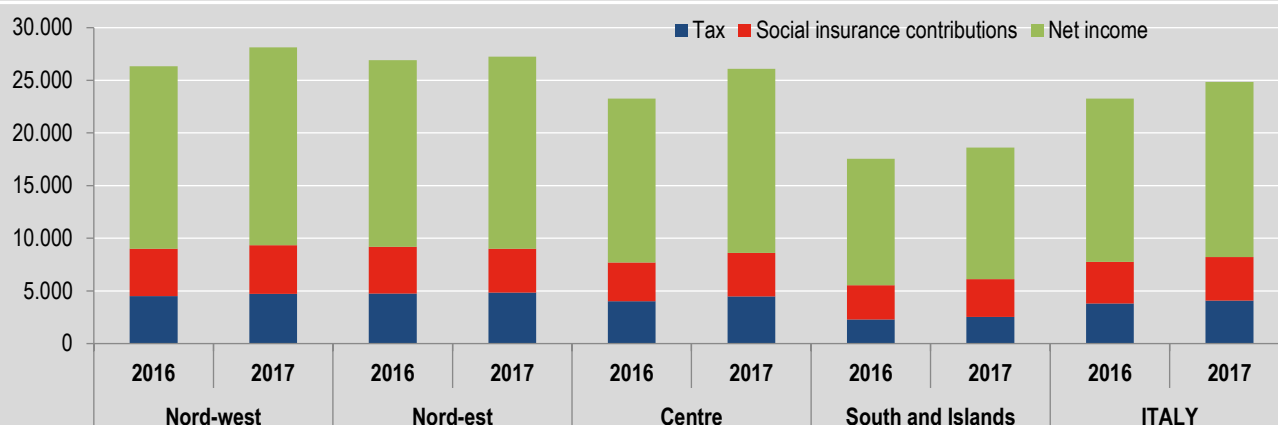
The incidence of direct tax on self-employment income, net of job vouchers, was substantially unchanged compared to 2016 (19.7% of the gross income, net of social contributions), also including the regional tax on productive activities (Irap) affecting the self-employment income. However, compared to 2016, the incidence of the tax decreased for male self-employed workers (-0.3 percentage points) and increased for female workers (+0.8 percentage points). Moreover, between 2016 and 2017, the tax burden increased for farmers and traders and decreased for entrepreneurs and freelancers.

In 2017, values above the national average of tax incidence were observed in the North-East (20.9%) and among male workers (20.4%). The incidence of taxes increased with the age of the worker: from 14.2% for those under 35 to 27.2% for those over 64. There was also an important gap between those who have obtained an university degree (22.8%) and those with a lower educational qualification (17.2% for the lower middle school).

The tax rate for self-employed with employees was almost 6 percentage points higher than those for self-employed without employees (22.8% against 16.9%); the tax rate for full-time workers (30 hours and more a week) was 4 percentage points higher than those for part time workers (19.8% against 15.8%).

In terms of distribution by professional activity, the tax burden was lower for farmers (16.9%), more than 18% for traders and craftsmen and 20.6% for entrepreneurs, freelancers and self-employed workers. The incidence of taxes was higher in the Centre for farmers and craftsmen and in the North-west for entrepreneurs and it was lower for self-employed income earners with foreign citizenship (-2.5 percentage points compared to Italian self-employed workers).

FIGURE 7. GROSS SELF-EMPLOYMENT INCOME COMPONENTS BY GEOGRAPHICAL DISTRIBUTION.
Years 2016-2017, average in euros (a)



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

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, 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): Persons at risk of poverty are those living in a household with an equivalised disposable income below the risk-of-poverty threshold, which is set at 60 % of the national median equivalised disposable income (after social transfers). The disposable income does not include imputed rents, non-cash employee income (other than company car) and income from household production of goods for own consumption. In 2018 the at-risk-of-poverty threshold (computed on 2017 incomes) was 10,106 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, resulting from work performed by an employee during the income reference period. It includes also the market value of the company car provided for private use, luncheon vouchers and other non-cash fringe-benefits.

Employer social insurance contributions: they include the employer's effective contributions and the burden for the provision for severance indemnities. From 2011 the contributions by the para-subordinate workers' employers are not included.

Equivalised income: obtained by dividing the household's total income from all sources by its equivalent size, which is calculated using the modified OECD equivalence scale. This scale attributes a weight to all members of the household: 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. The equivalent size is the sum of the weights of all the members of a given household.

Europe 2020 Strategy: is the EU's agenda for growth and jobs for the current decade. It emphasises smart, sustainable and inclusive growth in order to improve Europe's competitiveness and productivity and underpin a sustainable social market economy. To reach this objective, the EU has adopted targets to be reached by 2020 in five areas: employment; research & development; climate change and energy; education, poverty and social exclusion.

Gini coefficient: it measures the level of income inequality; this index varies between 0 and 1. The extreme value of 0 expresses perfect income equality (everyone has the same income), while the extreme value of 1 expresses full inequality (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: obtained by summing: net employee income, without figurative and in-kind components; personal income tax; 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 employee incomes (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.), self-employment incomes, financial and real capital incomes, pensions and other public and private transfers received, monetary values 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 a more extensive definition of the household net income used at European level. The household net income reported in this note is not comparable with the Family sector disposable income used in 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 rents and in-kind components (monetary value of goods produced for own consumption and fringe benefits such as luncheon vouchers, health care reimbursements, school or nursery care, holiday bonuses, goods produced by the company, etc.); the private use of the company car instead is included

in this income definition. In this note, this 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 should be paid for a similar dwelling to 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 to the Consumer price Index for the whole nation (NIC), since it refers exclusively to monetary expenditures for final consumption by households and ensures a comparable European inflation measure.

Income quintile share ratio (S80/S20): It is the ratio of total income received by the 20 % of the population with the highest income (top quintile) to that received by the 20 % of the population with the lowest income (lowest quintile). Income must be understood as equalised disposable income.

Individual gross income net of social insurance contributions: it includes gross employee incomes, self-employed incomes, 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 incomes. It corresponds to the sum of net personal incomes (without figurative and in-kind components) and personal income taxes 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 dividing the frequency distribution into two equal parts (50% of households have a household income level lower than or equal to the median, 50% have 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 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 income 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 portion of the taxable amounts of the independent taxpayer corresponding to the taxable income. As calculated on the taxable income, IRAP is similar to a direct tax.

Self-employment income: it is the income derived from self-employment jobs, where the remuneration depends on profits (or potential for profits) derived from goods 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 an indicator that expresses the inability to afford some items considered by most people to be desirable or even necessary to lead an adequate life. It measures the percentage of the population that cannot afford at least three 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 employees, self-employed workers, free-lance workers (coordinated and continuous collaborators and project collaborators) and employers. Figurative contributions are not estimated in the Eu-Silc survey.

Social contributions of self-employed workers: include social contributions by self-employed workers, free-lance workers and their employers. From 2017, they include also 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 persons living in a household where the members of working age worked less than 20% of their total potential during the previous 12 months. 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 people 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, used for about 44% of the households in 2018.

The sample design is based on a two-stages 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 2018, it amounts to 21,173 households (45,761 individuals), residing in about 636 municipalities.

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

- 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.);
- Household questionnaire to collect information about housing conditions, housing expenses, economic situation, material deprivation, household income components;
- Personal questionnaire for each household member aged at least 16 years to collect information on education, health, current or previous labour, income by source (employee income, self-employment income, 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 allows to estimate taxes and social contributions paid by individuals that, added to the net income, constitute gross incomes.

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, measurable as standard error or relative error (the standard error divided by the mean estimate, named as 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 the standard error multiplied by a coefficient depending on the confidence level chosen, to the punctual estimate. Taking into account a confidence level of 0.95 ($\alpha=0.05$), the coefficient is 1.96.

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

RELATIVE ERRORS, STANDARD ERRORS AND CONFIDENCE INTERVALS OF THE MAIN INDICATORS ESTIMATES. Year 2018

| | 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) | 27.3 | 0.01948 | 0.53158 | 26.3 | 28.3 |
| Population at risk of poverty (out of 100 individuals) | 20.3 | 0.02272 | 0.46122 | 19.4 | 21.2 |
| Severe material deprivation (out of 100 individuals)) | 8.5 | 0.05146 | 0.43915 | 7.7 | 9.4 |
| Very low working intensity (out of 100 eligible individuals) (a) | 11.3 | 0.03872 | 0.43577 | 10.4 | 12.1 |
| Mean net household income (year 2017, values in euros) | | | | | |
| - Excluding imputed rents | 31,393 | 0.00695 | 218.02603 | 30,965 | 31,820 |
| - Including imputed rents | 36,293 | 0.00623 | 225.94119 | 35,850 | 36,736 |
| S80/S20 | 6.1 | 0.02034 | 0.12351 | 5.8 | 6.3 |
| Gini coefficient | 33.4 | 0.01469 | 0.49028 | 32.4 | 34.3 |

| | | | | | |
|--|--------|---------|-----------|--------|--------|
| Mean gross household income (year 2017, values in euros) | 38,649 | 0.00797 | 308.11906 | 38,045 | 39,253 |
| Labour cost (year 2017, values in euros) | 31,783 | 0.00903 | 286.89233 | 31,221 | 32,345 |

(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 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, λ_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, λ_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 β_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.