

# PENSION ENTITLEMENTS IN ITALY

A new table was introduced by the European System of Accounts (ESA) 2010, in force since September 2014 (EU Regulation No 549/2013), aimed at enhancing statistical coverage of old-age provisions and its comparability between countries. The “Supplementary table on accrued-to-date pension entitlements in social insurance” (that is, Table 29) aims at presenting a complete picture of entitlements of households from social insurance pension schemes, in the framework of national accounts. EU member countries compiled Table 29 for the first time at the end of 2017 for the reference year 2015. Since the compilation is a statistical requirement to be fulfilled every three years, Table 29 is now at its second edition, with 2018 as the reference year.

## Content and structure of Table 29

Social insurance covers funded collective employment-related pension schemes, such as pension funds, that are already included in the core national accounts and are recast in Table 29 (columns A to F). In the new table, the unfunded components are also represented, that is pension schemes provided by general government as an employer (column G) and social security pension schemes (column H), both previously outside the scope of national accounts. These components are still excluded from the core national accounts and therefore, they do not contribute to the definition of households saving nor to the calculation of public finance balances.

Therefore, entitlements of households towards social security pension schemes, which are the most important source of pension obligations by the general government and other institutional sectors in the EU, are presented in the context of national accounts as supplementary data estimated on the basis of actuarial model calculations. The boundary of Table 29 includes old age pensions (including early retirement), survivors’ and disability pensions, while individual pension plans are excluded, together with non-contributory pensions such as social assistance, for which the actuarial estimation of entitlements is not feasible.

Table 29 is structured as a balance sheet of accrued-to-date pension entitlements of households, showing the initial and final stock of entitlements (rows 1 and 10) in a given year and the underlying flows which account for the change in entitlements (rows 2 to 9). Accrued-to-date entitlements provide a measure of the actuarial value of pension rights accumulated by retired persons as well as by the current workforce up to the present, without taking into account entitlements that will be accrued in the future by the current workforce, nor by expected new entrants in the system.

The actuarial estimation of entitlements over a long time horizon requires hypotheses on the long term trends of key demographic and economic parameters, which must be harmonized between EU member countries in order to ensure comparability. Among these, the discount rate applied to calculate the present value of accrued-to-date entitlements plays a key role, since it has a decisive influence on the final outcome: the lower the rate, the higher the estimate of the present value, and vice versa. For this reason, ESA 2010 provides for the transmission of two additional versions of Table 29 for pension schemes not included in the core national accounts (columns G and H). These versions show to what extent the estimates based on actuarial model calculations change if the discount rate is set at one percentage point higher or lower than the one agreed for the base scenario, assumed at 4% nominal (2% real) for the reference year 2018.

The concept of accrued-to-date entitlements (or obligations, from the counterpart’s point of view of pension managers) limits the time horizon to the present time, in accordance with the perspective of national accounts, and does not take into account expected flows of pension contributions. Hence, it is not by any means a measure of the sustainability of pension schemes, which necessarily requires the parallel projection of future pension benefits and contributions. At European level, the projected impact of pension schemes on the sustainability of public finances is addressed every three years by the European Commission in the Ageing Report, whose updated 2021 edition is due to be published soon, and by each EU member country in the context of the Stability Programme Update.

## Main statistical findings

The columns of Table 29 relevant for Italy are those about private pension funds, already included in the core national accounts albeit with less detail (columns A, B and C), and the one about public mandatory social security pension schemes (column H), introduced by ESA 2010. Column G regarding pension schemes provided by general government as an employer is not compiled, since in Italy there is no separate pension regime for general government employees as a whole. Pension entitlements accrued by this category are therefore included in column H.

Accrued-to-date pension entitlements towards pension funds at the end of 2018 are estimated at 130.4 billion euro or 7.4% of GDP (Table 1, column C). The main component is defined contribution schemes, which show an increase in entitlements with respect to the previous year, while defined benefit schemes show a decrease, as in the preceding edition of Table 29. This result is not surprising, since the latter are not allowed to collect new members since 1992 and are now mostly made up of pensioners.

The estimate of individual pension entitlements towards social security pension schemes is the output of a dedicated simulation model, based on a very detailed data base concerning pensioners and current contributors (private employees, public employees, self-employed, professionals, other) provided by the National Institute of Social Insurance (INPS). In the model, separate modules are implemented for pensioners and for workers that are paying or have paid contributions. For pensioners, two submodules deal with direct pensions and survivors pensions. For contributors, two submodules concern the defined benefit regime in force until the 1995 reform, and the full-fledged notional defined contribution (NDC) regime following the completion of the transition under Law no. 214/2011. For the transition period to the NDC regime, both submodules are combined in the estimation of entitlements.

Following ESA 2010 rules, severance pay schemes for private and public employees (*trattamento di fine rapporto*, TFR, and the like) and social assistance pensions have been excluded from the estimates, together with pension supplements (*maggiorazioni sociali, quattordicesima*). Topping-up to the minimum pension (*integrazione al minimo*) has been retained, as a solidarity component inherent in the pension system (Constitutional Court, Sentence no. 240/1994).

At the end of 2018, accrued-to-date pension entitlements towards social security pension schemes are estimated at 6,930.9 billion euro or 391.3% of GDP (Table 1, column H). The annual estimated increase in entitlements with respect to the end of 2017 amounts to less than 3% of GDP. The sensitivity analysis on column H provided for by ESA 2010 shows the high relevance of the discount rate parameter, set in the baseline at 4% nominal (2% real) as stated above: setting the discount rate at one percentage point higher or lower than the base scenario has an impact on the estimates of almost 60% and nearly 75% of GDP, respectively, in the opposite direction (Table 2). For the same reason, a direct comparison between the estimate of the base scenario in 2018 and the estimate of the base scenario in 2015 is not correct, since the latter was based on the hypothesis of a 5% nominal (3% real) discount rate. Under the same discount rate (4%) accrued-to-date pension entitlements towards social security pension schemes have increased from 6,603.4 billion euro at the end of 2015 to the above mentioned 6,930.9 billion at the end of 2018 (respectively, 398.9% and 391.3% of GDP).

Finally, total pension entitlements at the end of 2018 amount to 7,061.3 billion euro or 398.7% of GDP (Table 1, column I). This figure compares with totals recently estimated by other European countries for the same reference year and on the basis of homogeneous hypotheses at the European level (starting from the discount rate). In particular, the ratio of total pension entitlements to GDP amounts to 438% in France, 336% in Germany and 362% in Spain.

The compilation of Table 29 has been made possible by the contribution of other institutions, such as the Ministry of Economy and Finance (State General Accounting Department – I.GE.SPE.S) and INPS. In particular, the update of the actuarial model underlying the estimation of column H derived from the cooperation between Istat, INPS and RGS. The cooperation of COVIP (Pension Funds Supervisory Authority) has been instrumental for the estimation of the other columns of Table 29.

**Useful links:**

Information on the Italian pension system in 2018 (Update of the Country Fiche on public pensions – Italy):

[https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070\\_en](https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070_en)

Information on private pension funds in Italy:

<https://www.covip.it/en/annual-reports-publications/main-data>

Updated parameters used in the model projections underlying column H of Table 29:

[https://ec.europa.eu/info/publications/2021-ageing-report-underlying-assumptions-and-projection-methodologies\\_en](https://ec.europa.eu/info/publications/2021-ageing-report-underlying-assumptions-and-projection-methodologies_en)

ECB-Eurostat Technical Compilation Guide for Table 29 -- 2020 edition:

<https://ec.europa.eu/eurostat/web/products-manuals-and-guidelines/-/KS-GQ-20-008>

Estimates of accrued-to-date entitlements for other EU member states:

<https://ec.europa.eu/eurostat/web/pensions/data/database>

The 2018 European Commission Ageing Report (2021 edition is forthcoming):

[https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070\\_en](https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070_en)

**Table 1. Accrued-to-date pension entitlements in social insurance: base case, 4% nominal discount rate (million euro)**

Relations	Row No.	Recording	Core national accounts					Not in the core accounts		Total Pension Schemes	Counterparts: entitlements of	
		Pension manager	Non-general government			General government					Resident households	Non-resident households
			Defined contribution schemes	Defined benefit schemes and other non-defined contribution schemes	Total	Defined contribution schemes	Defined benefit schemes for general government employees					
Column number	A	B	C	D	E	F	G	H	I	J	K	
<i>Opening balance sheet - 31.12.2017</i>												
	1	Pension entitlements (incl. contingent pension entitlements)	120.873	7.336	128.209				6.747.239	6.875.448		
		Pension entitlements (% of Gross Domestic Product 2017)	7,0%	0,4%	7,4%				388,5%	395,9%		
<i>Changes in pension entitlements due to transactions</i>												
Σ (2.1 to 2.4) - 2.5	2	Increase in pension entitlements due to social contributions	11.306	1.040	12.346				454.746	467.092		
	2.1	Employer actual social contributions	7.670	958	8.628				115.003	123.631		
	2.2	Employer imputed social contributions		0	0					0		
	2.3	Household actual social contributions	3.113	23	3.136				69.853	72.989		
	2.4	Household social contribution supplements	1.037	73	1.110				269.890	271.000		
	2.5	Less: Pension scheme service charges	514	14	528				0	528		
	3	Other (actuarial) change of pension entitlements in social security pension schemes							-8.475	-8.475		
	4	Reduction in pension entitlements due to payment of pension benefits	5.874	1.387	7.261				262.604	269.865		
<i>Changes in pension entitlements due to other flows</i>												
2 + 3 - 4	5	Changes in pension entitlements due to social contributions and pension benefits	5.432	-347	5.085				183.667	188.752		
	6	Transfers of pension entitlements between schemes	67	5	72				0	72		
	7	Change in entitlements due to negotiated changes in scheme structure		0					0	0		
	8	Changes in entitlements due to revaluations	-2.135	-855	-2.990				0	-2.990		
	9	Changes in entitlements due to other changes in volume	0	0	0				0	0		
<i>Closing balance sheet - 31.12.2018</i>												
1+ Σ (5 to 9)	10	Pension entitlements (incl. contingent pension entitlements)	124.237	6.139	130.376				6.930.906	7.061.282		
		Pension entitlements (% of Gross Domestic Product 2018)	7,0%	0,3%	7,4%				391,3%	398,7%		

The cells shown as ■ are not applicable; the cells in ■ will contain data which are not in the core national accounts.

**Table 2.** Accrued-to-date pension entitlements in social insurance - sensitivity analysis, column "H" (million euro)

Relations	Row No.	Recording	Not in the core accounts		
		Pension manager	General government		
			Social security pension schemes		
		nominal discount rate	3%	4%	5%
<i>Opening balance sheet - 31.12.2017</i>					
	1	Pension entitlements (incl. contingent pension entitlements)	8.038.758	6.747.239	5.761.830
		Pension entitlements (% of Gross Domestic Product 2017)	462,9%	388,5%	331,8%
<i>Changes in pension entitlements due to transactions</i>					
$\Sigma$ (2.1 to 2.4) – 2.5	2	Increase in pension entitlements due to social contributions	426.019	454.746	472.948
	2.1	Employer actual social contributions	115.003	115.003	115.003
	2.2	Employer imputed social contributions			
	2.3	Household actual social contributions	69.853	69.853	69.853
	2.4	Household social contribution supplements	241.163	269.890	288.092
	2.5	Less: Pension scheme service charges	0	0	0
	3	Other (actuarial) change of pension entitlements in social security pension schemes	52.514	-8.475	-52.009
	4	Reduction in pension entitlements due to payment of pension benefits	262.604	262.604	262.604
<i>Changes in pension entitlements due to other flows</i>					
2 + 3 - 4	5	Changes in pension entitlements due to social contributions and pension benefits	215.929	183.667	158.335
	6	Transfers of pension entitlements between schemes	0	0	0
	7	Change in entitlements due to negotiated changes in scheme structure	0	0	0
	8	Changes in entitlements due to revaluations	0	0	0
	9	Changes in entitlements due to other changes in volume	0	0	0
<i>Closing balance sheet - 31.12.2018</i>					
1+ $\Sigma$ (5 to 9)	10	Pension entitlements (incl. contingent pension entitlements)	8.254.687	6.930.906	5.920.165
		Pension entitlements (% of Gross Domestic Product 2018)	466,1%	391,3%	334,3%

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