

## I. EXECUTIVE SUMMARY

**The debt-to-GDP ratio for the General Government sector has decreased for the second quarter running, although in nominal terms Government indebtedness has hit a new historic high.** As reflected in the data published by the Bank of Spain for Q3 2016, the debt-to-GDP ratio for the General Government sector overall reached 100.3% in September 2016 (€1,107.69m), seven tenths of a percentage point below the data for the previous quarter.

**From the trends in the third quarter, disaggregated by subsectors, it can be observed that both the Central Government (CG), together with the Social Security Funds (FSS), and the Autonomous Regions (AR) have reduced their ratios, despite still being far from their reference limit established in the Organic Law on budget and financial stability (LOEPySF).** In this third quarter, the CG and the FSS together reached a debt ratio of 72.6% of GDP (in contrast to 72.9% in the second quarter of 2016), almost 30 pp above the reference level stated in Transitional Provision One of LOEPySF. For the Autonomous Regions, this ratio reached 24.6% of GDP (€271.98m), three tenths of a percentage point less than in Q2 2016 and still far from the 13% of GDP threshold required in the LOEPySF for 2020. Local Corporations' debt ratio reached 3.1%, very close to their reference of 3% of GDP.

**Although the Autonomous Regions subsector overall reduced its debt by €841m from the second quarter, their performance was fairly heterogeneous, leading to reduced indebtedness in just ten Autonomous Regions: Andalusia, Aragón, Asturias, Castilla y León, Extremadura, Galicia, La Rioja, Murcia, Navarra and Basque Country.** Regional debt remains concentrated in the Mediterranean arc Autonomous Regions and in Castilla-La Mancha. As reflected in the second quarter Debt Flash, the inhabitants of Catalonia, Valencia, Balearic Islands, Murcia and Castilla-La Mancha will still need to dedicate more than 100 work days to meet the regional debt accrued in 2016. The main novelty regarding the previous edition of the Debt Flash is the marginal increase in the number of days for the majority of Autonomous Regions (especially in the case of Catalonia and Cantabria, with an increase of 7 and 5 days, respectively), excepting Canary Islands, Basque Country and Galicia, where this number has remained stable. As for creditworthiness classifications, Moody's raised the rating for Andalusia by one step, from Ba1 to Baa3, while S&P did the same with Balearic Islands, raising its rating from BBB- to BBB.

**Debt-to-GDP forecasts for year-end 2016 in the Draft Budgetary Plan presented by the Government early in December are at 99.4% of GDP, in line with but slightly below AIReF's neutral scenario.** For the remainder of the year, with the available information on Treasury auctions, it appears that the Treasury will meet its net financing target forecast for the year of €35bn, although some elements are as yet uncertain. On

the one hand, the impact on the final debt data from the €5.29bn loan facility agreement between the Kingdom of Spain and the Single Resolution Board, which corresponds to Spain's contribution to financing the Single Resolution Fund within the banking union project approved at the Council of Ministers on 2 December. On the other hand, regarding the Autonomous Regions, their debt is expected to increase during the remainder of the year, owing to disbursements pending from extraordinary funding mechanisms (FLA). Finally, as far as Local Corporations are concerned, we can expect that, as in previous years, they will use a part of their surplus to pay off debt in the last quarter of this year.

**Looking ahead, debt-to-GDP for the General Government sector overall foreseen in the neutral scenario simulated by AIReF presents a sustainable profile, but its gradual correction is deemed insufficient to reach the threshold of 60% of GDP over the next 2 years, as established in the LOEPySF for 2020. AIReF's neutral scenario path, therefore, deviates from the trend forecast in the Draft Budgetary Plan Update for 2017, according to which the debt-to-GDP ratio for the General Government sector overall would drop more rapidly (about 4 pp in cumulative figures for the period 2016-2019).** The path forecast in AIReF's neutral risk scenario is expected to undergo minimal corrections until 2018, when a significant declining path will foreseeably commence, according to simulations associated with this scenario. The rate of decline, however, is gentle and may imply reaching the limit of 60% of GDP by 2039, which is a far cry from the year 2020 as called for in the Transitional Provision One on Budgetary Stability and Financial Sustainability. The Central Administration and the FSS, along with the Autonomous Regions overall, are expected to reach their corresponding threshold values (44% and 13% of GDP, respectively) around the year 2039 (although some regions, namely Castilla La-Mancha, Catalonia, Murcia and Valencia, may not reach it until beyond 2045). Finally, as mentioned above, the Local Corporations are in a more favourable position and may meet the target of 3% of GDP in the current year, 2016.

**The key assumption to ensure sustainability in the medium-long term is budgetary restraint, with primary balances that do not undo the recent fiscal effort.** Having tested the neutral path in different stress scenarios with regard to the main determinants, we must highlight the importance of the assumption made on the effort in primary terms. Indeed, the sensitivity analysis for the neutral path under real, financial and economic policy disruptions shows that: (i) temporary macroeconomic shocks, such as slower economic growth or an increase in interest rates, fail to alter the sustainable dynamics of the decreasing debt ratio, and (ii) the assumptions regarding the evolution of the primary balance are key to the dynamics over coming years, given that a smaller fiscal effort may lead to an unsustainable path.

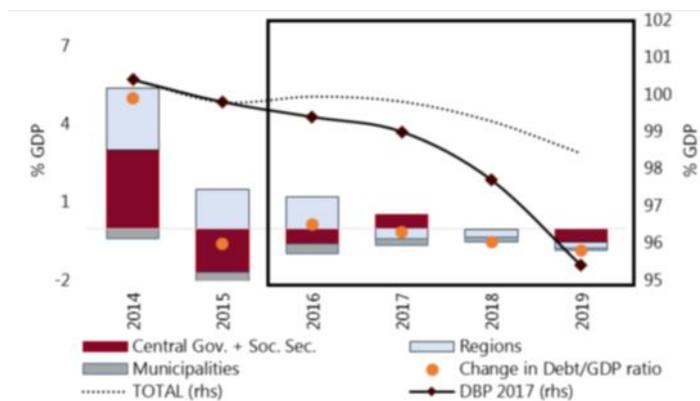
**TABLE 1. DEBT AND DERIVED INDICATORS. GENERAL GOVERNMENT SECTOR, SUBSECTORS AND BREAKDOWN OF AUTONOMOUS REGIONS (% OF GDP)**

Deuda	2007	2015	2016-III	Debt Dynamics				Days needed to repay the debt <sup>3)</sup> 2016				Rating <sup>4)</sup>			Financing cost 2016		FLA and financing mechanisms (% debt) 2016-III	Debt per capita (€) 2016	Fiscal effort indicator S1 <sup>5)</sup> 2016
				2016	2017	2018	2019	2016 regional	2016 comB	2016 total	Δ 07-16 total	Moody's	S&P	Fitch	Tipo Implicito	% PIB			
AAPP <sup>2)</sup>	35.5	99.8	100.3	99.9	99.8	99.3	98.4	-	-	-	-	-	-	-	2.6	2.8	-	24,047	-
AC+FSS	27.1	72.1	72.6	71.5	72.0	72.0	71.5	-	-	-	-	-	-	Baa2 (4) ↔	BBB+ (4) ↔	BBB+ (4) ↔	3.0	2.4	-
CCLL	2.7	3.3	3.1	2.9	2.7	2.5	2.3	-	-	-	-	-	-	-	1.7	0.1	20.9	-	-
TOTAL CCAA <sup>2)</sup>	5.7	24.5	24.6	25.6	25.2	24.9	24.7	-	-	-	-	-	-	-	1.5	0.4	50.7	6,139	-
ANDALUCIA	4.8	21.9	21.8	22.5	21.9	21.5	21.3	82	368	451	292	Baa3 (4) ↑	BBB (4) ↔	BBB- (4) ↔	1.2	0.3	66.9	4,001	0.0
ARAGON	3.4	20.6	21.2	22.4	22.4	22.3	22.7	82	248	330	218	-	BBB- (4) ↔	-	2.3	0.5	29.5	5,896	0.2
PRINCIPADO DE ASTURIAS	3.2	18.0	18.6	18.3	18.3	18.2	18.0	67	305	372	241	-	-	BBB (4) ↔	1.2	0.2	36.1	3,919	-0.1
ILLES BALEARS	6.9	30.4	30.7	31.3	30.2	28.9	28.5	114	259	373	245	-	BBB (4) ↑	-	1.0	0.3	63.7	7,904	0.4
CANARIAS	3.7	15.8	15.8	15.7	15.2	14.4	13.9	57	317	375	238	-	BBB+ (4) ↔	BBB- (4) ↔	1.0	0.2	60.9	3,232	-0.2
CANTABRIA	3.4	22.1	22.7	24.2	24.4	24.4	24.2	88	304	393	264	-	-	BBB (4) ↔	1.3	0.3	61.0	5,191	0.2
CASTILLA Y LEÓN	3.4	19.6	19.8	20.5	20.5	20.2	19.8	75	289	363	233	Baa2 (4) ↔	-	-	2.1	0.4	18.8	4,636	-0.1
CASTILLA-LA MANCHA	4.7	35.8	35.9	36.8	36.1	35.6	35.3	134	345	480	328	Baa2 (5) ↔	-	BBB- (4) ↔	1.3	0.4	66.3	6,978	0.9
CATALUÑA	7.8	35.7	35.6	37.7	37.0	36.8	36.7	138	228	366	245	Baa3 (5) ↓	B+ (6) ↓	BB (5) ↓	1.3	0.4	62.8	10,782	1.0
EXTREMADURA	4.5	20.4	22.1	23.6	24.1	25.0	25.6	86	394	480	302	Baa3 (4) ↔	BBB (4) ↔	-	2.2	0.4	39.4	3,924	0.5
GALICIA	6.6	18.7	18.7	18.7	18.3	17.7	16.9	68	308	376	225	Baa2 (4) ↔	BBB+ (4) ↔	-	2.3	0.4	20.2	3,974	-0.2
COMUNIDAD DE MADRID	5.2	13.8	14.2	14.8	14.8	14.7	14.7	54	200	253	152	Baa2 (4) ↔	BBB+ (4) ↔	BBB (4) ↔	2.7	0.4	6.5	4,831	-0.2
REGIÓN DE MURCIA	2.3	27.5	28.6	29.9	29.9	30.2	30.6	109	333	442	303	Baa2 (5) ↔	-	BBB- (4) ↔	1.5	0.4	73.5	5,869	0.9
C. FORAL DE NAVARRA	3.6	18.3	19.7	18.8	18.5	18.0	17.2	69	221	290	188	-	A (3) ↔	-	2.7	0.5	-	5,568	-0.2
PAÍS VASCO	1.0	14.5	15.2	14.6	14.4	14.0	13.6	53	208	261	172	Baa1 (4) ↔	A (3) ↑	BBB+ (4) ↔	1.8	0.2	-	4,585	-0.2
LA RIOJA	3.5	18.1	18.2	18.2	17.8	17.7	17.4	67	246	313	198	-	-	BBB (4) ↔	0.5	0.1	18.4	4,851	-0.2
COMUNITAT VALENCIANA	11.3	41.5	41.6	43.1	42.1	41.5	41.0	157	305	462	300	Baa2 (5) ↔	BB (5) ↔	BBB- (4) ↔	1.0	0.4	73.0	9,246	1.2

Source: INE, IGAE, Bank of Spain, DatosMacro.com and AIREf estimates (simulation for the neutral path)

**Notes: 1)** The debt-to-GDP ratios published by the Bank of Spain are calculated using the nominal GDP estimated by INE in the latest quarterly national accounting. **2)** For the data disseminated by the Bank of Spain on the debt-to-GDP ratio for market prices in each of the Autonomous Regions, the corresponding regional GDP pm as published by INE has been taken, except for the latest available data; in this case, the regional structure of the Spanish Regional Accounting is applied to the aggregate for the last four quarters of nominal GDP. In the projected figures, the estimate for nominal regional GDP is calculated following the METCAP-AIREf methodology. **3)** The number of days per person required to repay the debt, in the regional case, derives from multiplying by 365 the ratio of said debt to the respective regional GDP. For common debt (Central Government and Social Security Funds plus the Local Corporations subsector), this is distributed among the regions according to the size of the population in each region, so that the resulting debt ratio to the corresponding regional GDP is then multiplied by 365. **4)** (M) Moody's, (F) Fitch and (S) Standard and Poor's. The quality rating may be (3) Upper standard grade, (4) Lower standard grade, (5) Non-speculative investment grade, and (6) Highly speculative. **5)** S1 indicator is defined as the mean primary balance required between 2016-2030 to reach the target of 13% of GDP by 2030.

**CHART 1. CONTRIBUTION TO THE VARIATION IN TOTAL GENERAL GOVERNMENT SECTOR DEBT BY SUBSECTORS (% GDP)**

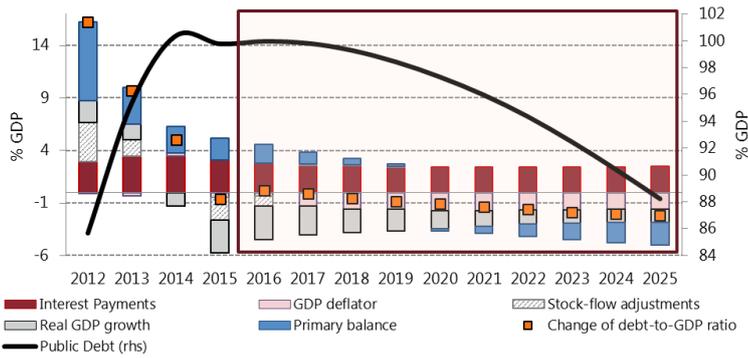


- The debt-GDP ratio for the General Government sector reached 100.3% in September 2016.
- According to the 2017 Draft Budgetary Plan Update, this ratio is to drop some 4 pp during the period 2016-2019, deviating from the neutral path forecast by AIREf time progresses.
- As of 2017, the Autonomous Regions are expected to contribute to a reduction in the debt ratio, as is already the case with Local Corporations.

Source: INE, IGAE, Bank of Spain, Ministry of Economy, Industry and Competitiveness, and estimates by AIREf

**CHARTS 2, 3 AND 4. EVOLUTION IN THE DEBT-TO-GDP RATIO AND SENSITIVITY ANALYSIS**

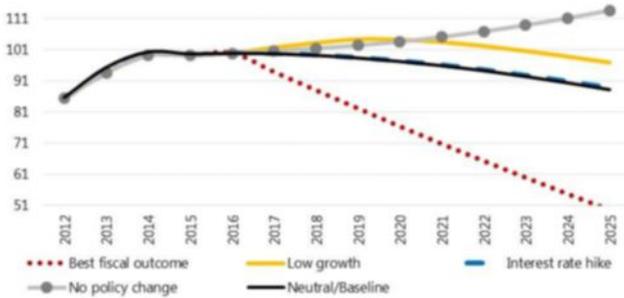
**DEBT DYNAMICS AND DETERMINANTS, NEUTRAL SCENARIO (% GDP)**



- The ratio is expected to enter a downward trend after 2018, but insufficient to reach 60% of GDP by 2020.
- Improvement to the primary balance will contribute steadily to reducing the ratio as of the year 2020.
- The denominator effect is greater than that of the interest burden since 2015.
- Macroeconomic disruptions are not expected to alter the debt reduction dynamic.
- Assumptions regarding the trend in primary balance are key to future sustainability.
- From a probabilistic viewpoint, the debt path underpinning the 2017 Draft Budgetary Plan Update is mildly optimistic.

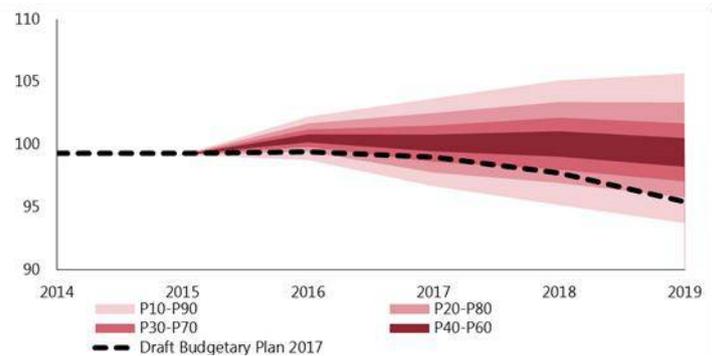
Source: INE, IGAE, Bank of Spain and AIREF estimations

**DEBT DYNAMICS IN DIFFERENT SCENARIOS (% GDP)**



Source: INE, IGAE, Bank of Spain and AIREF estimations

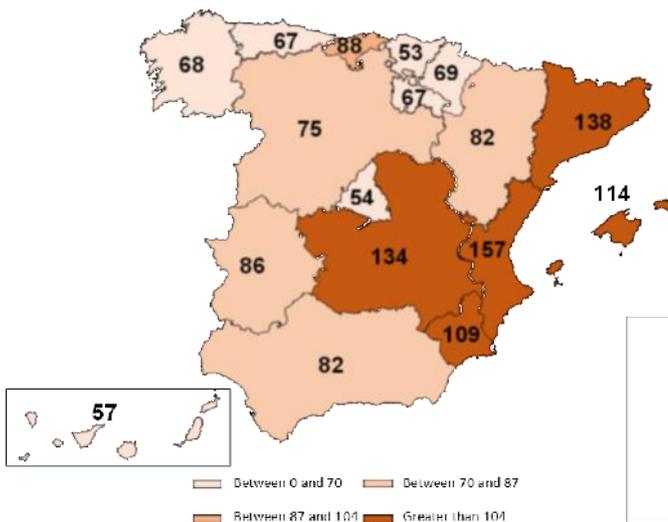
**DEBT DYNAMICS, STOCHASTIC SCENARIOS AND DRAFT BUDGETARY PLAN FOR 2017 (% GDP)**



Source: INE, IGAE, Bank of Spain and AIREF estimations

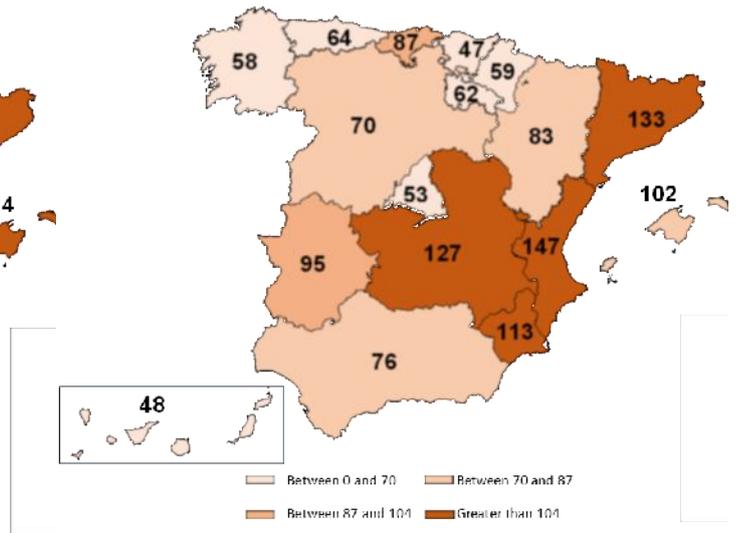
**CHARTS 5 AND 6. REGIONAL DEBT INDICATORS PER INHABITANT (NUMBER OF DAYS)**

**DAYS NEEDED TO REPAY THE AUTONOMOUS REGION'S DEBT (2016)**



Source: INE, IGAE, Bank of Spain and AIREF estimations

**DAYS NEEDED TO REPAY THE AUTONOMOUS REGION'S DEBT (2020)**

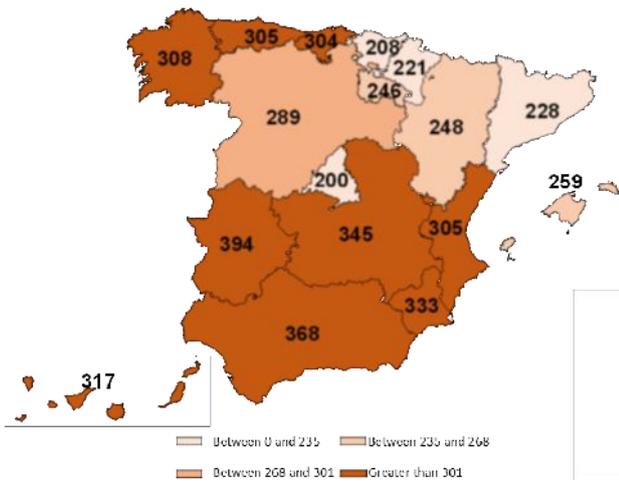


Source: INE, IGAE, Bank of Spain and AIREF estimations

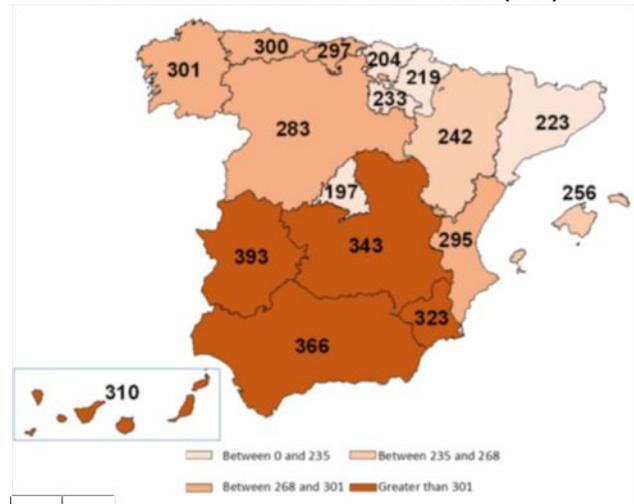
**Note:** The number of days per person required to repay the debt, in the regional case, derives from multiplying by 365 the ratio of said debt to the respective regional GDP.

**CHARTS 7, 8 AND 9. COMMON DEBT INDICATORS PER INHABITANT (NUMBER OF DAYS) AND FISCAL EFFORT**

**DAYS NEEDED TO REPAY THE COMMON DEBT (2016)**



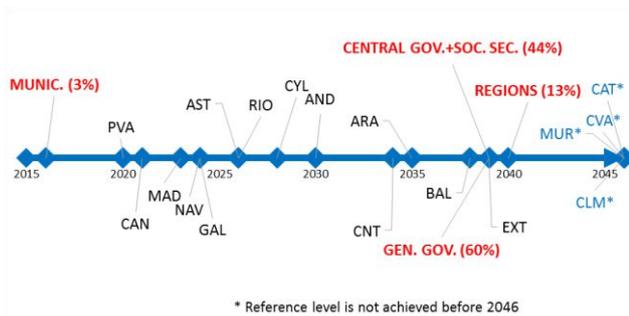
**DAYS NEEDED TO REPAY THE COMMON DEBT (2020)**



Source: INE, IGAE, Bank of Spain and AIReF estimations

Note: For common debt (Central Government and Social Security Funds plus the Local Corporations subsector), this is distributed among the regions according to the size of the population in each region, so that the resulting debt ratio to the corresponding regional GDP is then multiplied by 365.

**YEAR IN WHICH THE REFERENCE VALUE IS MET**

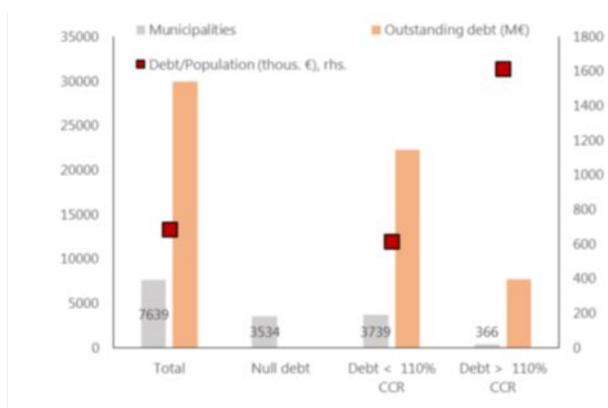


Source: INE, IGAE, Bank of Spain and AIReF estimations

- The Mediterranean arc and Castilla-La Mancha require a greater number of work days per person to repay their regional debt.
- If within each region the number of work days per person needed to repay the corresponding fraction of common debt is calculated, the result is a number exceeding 300 days in the regions of Castilla-La Mancha, Valencia, Murcia, Andalusia, Galicia, Asturias, Cantabria, Canary Islands and Extremadura.
- The projections for AIReF's neutral scenario point to a minor improvement over the next few years, with some reduction in the number of working days needed from now until 2020.
- Only the Local Entities (probably in 2016) and Basque Country are expected to reach the debt limits established by law for 2020.

**CHART 10. MUNICIPALITIES PER LEVEL OF DEBT ACCORDING TO THE RATIO OF CONSOLIDATED CURRENT REVENUES**

**MUNICIPALITIES PER LEVEL OF DEBT (2015)**



Source: Municipalities, Bank of Spain and SGCAL, and AIReF estimates.

- The debt trend in the subsector overall presents a highly sustainable profile.
- Nevertheless, a great deal of heterogeneity can be appreciated among the diverse Corporations.
- Of the 7 Local Corporations analysed, 46% (3534) have nil indebtedness, 49% (3739) remain below 110% of the Consolidated Current Revenues (CCR), and only 5% are above 110% (366) and are unauthorised to engage in new long-term credit operations.
- Andalusia, Madrid, Aragon and Catalonia, to a lesser extent, stand out as the holders of almost 80% of the €7683m owed by the Local Entities, with a debt-to-GDP ratio greater than 110%.