

I. EXECUTIVE SUMMARY

The General Government (GG) debt-to-GDP ratio stood at 98.3% at the end of 2017, declining 0.3 percentage points as compared with the third quarter of the year. The data published by the Bank of Spain for the fourth quarter of 2017 as well as the Quarterly Spanish National Accounts (QSNA) by the National Statistics Institute (INE) put the debt-to-GDP ratio for the GG at 98.3% (€1,144.3 billion), almost unchanged from the figure recorded in the previous quarter. On a year-to-year basis, the outstanding debt has increased €37.1 billion, while the debt-to-GDP ratio has fallen 0.7%.

When disaggregating the quarter-to-quarter debt evolution by sub-sector, it can be observed that the debt-to-GDP ratio has decreased in the Central Administration (CA) and Local Governments (LG) and increased slightly in the Autonomous Regions. In the fourth quarter of 2017, the CA and the Social Security Funds (SSF) reached a debt-to-GDP ratio of 71.1% (€827.24 billion), 0.1 percentage points below the previous quarter. For the LG sub-sector the ratio decreased slightly to 2.5% GDP (€28.95 billion), while for regions the debt-to-GDP ratio increased 0.1 percentage points compared to the previous quarter and with virtually no changes on a year-to-year basis, standing at 24.8% GDP (€288.11 billion). In the case of the regions, the quarter-to-quarter increase of more than 1 percentage point in Valencia stands out, and at the opposite end the reductions observed in the Balearic Islands, Canary Islands, Navarre and Basque Country.

Despite the positive macroeconomic developments during 2017, the debt-to-GDP ratio has been adjusted by just 0.7% GDP, below the 2 percentage points required by the Organic Law on Budgetary Stability and Financial Sustainability (Stability Law). [AIReF's baseline scenario](#) continues to project that the values envisaged in the Stability Law for the GG will not be achieved before 2035. For the third year in a row, in 2017 the debt-to-GDP ratio has declined less than 2 percentage points, the minimum reduction called for in the Stability Law for years in which the growth rate of real GDP is higher than 2%. AIReF projects a slightly declining trend in the baseline debt scenario, which would delay the GG's achievement of the reference value of 60% GDP until 2035. At the regional level, the best placed are Canary Islands, Madrid and Basque Country, reaching a level close to the reference value stipulated in the Organic Law of Budgetary Stability and Financial Sustainability (Stability Law) (13% of GDP) within the next 3 years. Conversely, there are regions that would not be able to reach the reference level before 2040 under the assumptions underlying the baseline scenario (i.e. Catalonia, Valencia, Castile-La Mancha and Murcia). Only the LG sub-sector has been able to achieve the reference value as early as 2016, in anticipation of 2020, the year laid down in the First Transitional Provision (TP) of the Stability Law. As it has been mentioned on

several occasions, the impossibility of compliance with the TP for the rest of sub-sectors calls for its review, by establishing a demanding but realistic scenario. The Spanish Treasury credit rating issued by the agencies S&P and Fitch has improved compared to the December 2017 Monitor, increasing to level A-, and moving to the upper-middle investment category. In the case of the regions no changes have been observed with respect to the last Debt Monitor update.

The General Government's debt-to-GDP path projected by the government is still considered to be likely in the medium term. After including the latest data published relating to the GG accounts, National Accounts and interest rate trends, the materialization of the 2018-2020 debt projections contained in the 2018 update of the Draft Budgetary Plan (DBP) presented last October are still deemed as likely, according to the confidence interval of AIReF's baseline scenario. The same can be said of the 2018 forecasts presented in the 2018 Draft General State Budgets (GSB), with little variation with respect to the 2018 DBP. The probability that the debt-to-GDP ratio will be above what was expected by the Government is around 60% over the next 3 years. To this end, an analysis of the sensitivity of debt dynamics to changes in the main determinants identifies the main risks in the medium term as the correction of the structural deficit and the maintenance of primary surpluses.

Debt sustainability risks for the regional sub-sector remain high in the medium term, although there are some signs of improvement at the individual level. In relation to December 2017, no changes have been observed in the aggregate risk indicator for debt sustainability, both at the individual and sub-sector level, which remain high due to the high level of debt standing at around 25% GDP. It is projected that the regional sub-sector will not achieve the target of 13% before 2036 in AIReF's baseline scenario. However, there are positive factors in the short term, such as the upside surprises in the economic performance recently observed in most of the regions, along with improvements in the prospects for global growth and favourable developments in interest rates, which help to contain the risks observed. AIReF's analysis rates the level of aggregate risk for sustainability according to 6 levels (from low to very high), affected by 5 main factors or dimensions: (i) level of indebtedness; (ii) borrowing flows, associated with the evolution of the budget balance; (iii) capacity to repay, which represents the importance of current incomes; (iv) tax space available and (v) general economic conditions, including the labour market situation. As of December 2017, the regional risk map is very heterogeneous. On the one hand, it identifies a very high risk to sustainability in Catalonia, Castile-La Mancha, Murcia and Valencia. Then, Extremadura and Andalusia, with slightly high risks and then Aragon and Balearic Islands showing a medium level of risk. On the other hand, in nine regions the risks observed are slightly low or low. The first group includes Cantabria, Castile and Leon, Asturias and Galicia, while the second includes Navarra, Rioja, Canary Islands, Madrid and Basque Country.

The extraordinary mechanisms of financing the regions have continued to rise both in absolute terms (surpassing €166 billion at the end of 2017) and in relative terms (representing almost 60% of the total debt of the regional sub-sector). Funding mechanisms in 2017 accounted for more than 90% of the total debt issuance in Castile-La Mancha, Cantabria, Canary Islands, Murcia, Galicia, and Aragon. The rest of

the regions also covered half or more of their needs with funding mechanisms (except for Castile and Leon which showed a more restrained use of this instrument), except for Madrid, Navarre, Basque Country and Rioja, which have not made use of such mechanisms in 2017. In absolute terms, the use of the mechanisms by the regions remains uneven, as 65% of the total loans granted in 2017 to the sub-sector was concentrated in three regions, Catalonia (28% of the total), Valencia (20%) and Andalusia (17%). The first two are the most indebted relative to GDP, along with Castile-La Mancha.

The LG sector presents a low debt sustainability risk, it being the only sub-sector that has complied with the reference debt level ahead of the deadline laid down in the Stability Law, with financial assets to repay almost the entire stock of existing debt. At the sub-sector level, it is expected that the debt-to-GDP ratio will remain below 3% of GDP. However, there are large disparities in the per capita debt of the large municipalities (over 250 thousand inhabitants), with Zaragoza and Madrid being the most heavily indebted counties in these terms, and Bilbao, Las Palmas and Vigo the least. However, in the case of Zaragoza this situation is partially the result of the imputation of a loan derived from the investment operation in the city's trams. In the case of Madrid, although their per capita debt is high, the debt-to-revenue ratio is below 75% and the reduction effort made since 2012 stands at around 100% of said ratio. The primary balance recorded in 2017 has helped to reduce the sub-sector's debt by 10% in absolute terms (€3.3 billion). Since the end of 2012, LG deposits have nearly doubled in terms of GDP (2%), surpassing €20 billion. In this way, the net debt of liquid financial assets is close to 0.5% GDP.

TABLE 1. DEBT AND DERIVED INDICATORS. GENERAL GOVERNMENT SECTOR, SUB-SECTOR AND DETAIL OF THE REGIONS (% GDP)

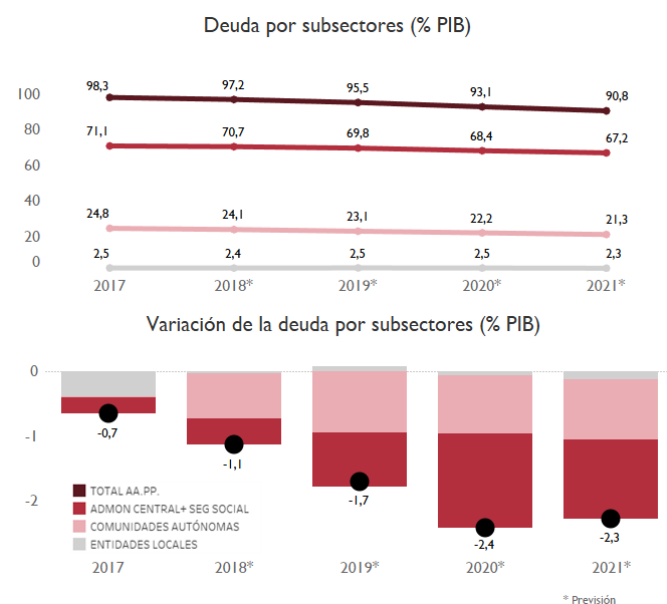
Indicadores de Deuda	2007	2017	Proyecciones				Días necesarios por persona para pagar la deuda ³⁾ 2017				Rating ⁴⁾			Coste financiero 2017		FLA y resto mecanismos (% deuda)	Deuda per capita (€)	Deuda / ing. corr ⁵⁾ (%)	Nec. endeud. / ing. corr (%) ⁶⁾	Indicador esfuerzo fiscal S1 ⁷⁾
			2018	2019	2020	2021	2018 regional	2018 comI	2018 total	Δ 07-18 total	Moody's	S&P	Fitch	Tipo Implícito	% PIB					
			2017-IV	2018	2017	2018	2018													
AAPP ¹⁾	35.6	98.3	97.2	95.5	93.1	90.8	-	-	-	-	-	2.4	2.6	-	25494	262.5	-	-		
AC+FSS	27.2	71.1	70.7	69.8	68.4	67.2	-	-	-	Baa2 (4) ↔	A- (3) [Z]	A- (3) [Z]	2.6	2.1	-	408.3	-	-		
CCLL	2.7	2.5	2.4	2.5	2.5	2.3	-	-	-	-	-	-	2.0	0.1	18.8	41.5	-	-		
TOTAL CCAA ²⁾	5.7	24.8	24.1	23.1	22.2	21.3	-	-	-	-	-	-	1.6	0.4	58.4	6313	176.2	24.9		
ANDALUCÍA	4.8	22.1	21.4	20.2	19.2	18.1	78	362	441	282	Baa3 (4) ↔	BBB+ (4) ↔	BBB- (4) ↔	1.3	0.3	75.0	4133	133.4	22.7	-0.1
ARAGÓN	3.4	22.1	21.9	21.7	21.8	21.7	80	242	322	210	-	BBB- (4) ↔	-	2.1	0.4	44.9	6330	168.4	24.1	0.2
P. DE ASTURIAS	3.2	18.7	18.1	17.7	17.5	17.1	66	302	368	237	-	-	BBB (4) ↔	1.1	0.2	39.2	4195	109.1	14.5	-0.2
ILLES BALEARS	6.9	29.4	27.4	25.7	23.8	22.3	100	259	359	232	-	BBB (4) ↔	-	1.3	0.4	72.2	7404	182.0	15.3	0.1
CANARIAS	3.7	15.9	14.3	12.1	9.7	7.7	52	326	378	242	-	BBB+ (4) ↔	BBB (4) ↔	1.2	0.2	66.6	3073	93.6	4.3	-0.9
CANTABRIA	3.4	23.2	22.6	22.6	22.4	22.1	83	297	380	251	-	-	BBB (4) ↔	1.6	0.4	74.1	5330	129.0	17.3	0.2
CASTILLA Y LEÓN	3.4	20.8	20.9	20.7	20.5	20.1	76	283	360	229	Baa2 (4) ↔	-	-	1.9	0.4	22.8	5164	140.4	18.9	0.0
CASTILLA-LA MANCHA	4.7	36.0	35.2	34.3	33.4	32.5	128	340	469	317	Ba2 (5) ↔	-	BBB- (4) ↔	1.4	0.5	75.1	7240	228.6	27.8	0.9
CATALUÑA	7.8	34.8	33.8	32.5	31.2	29.8	123	223	346	225	Ba3 (5) ↔	B+ (6) ↔	BB (5) ↔	1.6	0.5	70.9	10614	262.2	45.8	0.6
EXTREMADURA	4.5	23.8	23.8	23.7	23.7	23.5	87	389	476	298	Baa3 (4) ↔	BBB (4) ↔	-	1.6	0.3	55.4	4291	105.0	11.6	0.3
GALICIA	6.6	18.4	17.8	17.2	16.7	16.0	65	296	362	210	Baa2 (4) ↔	BBB+ (4) ↔	-	1.8	0.3	49.3	4212	116.9	12.9	-0.2
COMUNIDAD DE MADRID	5.2	14.9	14.5	13.9	13.1	12.6	53	197	250	147	-	BBB+ (4) ↔	BBB (4) ↔	2.4	0.3	5.9	5150	136.1	15.0	-0.3
REGIÓN DE MURCIA	2.3	29.0	29.9	29.9	29.9	29.7	109	324	433	294	Ba2 (5) ↔	-	BBB- (4) ↔	1.5	0.4	83.3	6466	188.2	29.5	0.9
C. FORAL DE NAVARRA	3.6	18.3	17.3	16.4	16.6	16.5	63	216	279	177	-	A (3) ↔	-	2.9	0.5	-	5614	92.6	6.3	-0.1
PAÍS VASCO	1.0	14.1	13.8	13.4	13.1	12.5	50	201	252	162	Baa1 (4) ↔	A (3) ↔	-	1.7	0.2	-	4788	88.6	10.6	-0.2
LA RIOJA	3.5	19.3	18.8	18.4	18.1	17.6	68	254	323	208	-	-	BBB (4) ↔	0.6	0.1	17.9	5168	127.6	28.2	-0.1
COMUNITAT VALENCIANA	11.3	42.5	41.3	39.8	38.2	36.6	151	302	452	291	Ba2 (5) ↔	BB (5) ↔	BBB- (4) ↔	1.0	0.4	83.6	9583	280.2	45.5	1.1

Source: INE, IGAE, Bank of Spain, DatosMacro.com and AIReF estimates (simulation corresponding to the neutral path).

Notes: **1)** The debt-to-GDP ratio disseminated by the Bank of Spain are calculated with the nominal GDP estimated by the INE in the last Quarterly National Accounts. **2)** For the data published by the Bank of Spain relating to the debt-to-GDP ratio at market prices of each of the regions, we took the corresponding regional GDP at market prices published by the INE, except for the last available data, where the regional structure of the Regional Accounts applies to the addition of the last four quarters of GDP at market prices. In the forecasts, the regional GDP at market prices estimate follows the METCAP-AIReF methodology. **3)** The days required per person to pay the debt by Region are derived by multiplying the respective regional debt-to-GDP ratio by 365. For the common debt (Central Administration and Social Security Funds plus Local Governments sub-sector) this is distributed regionally based on the size of the Region's population, so that the resulting regional debt-to-GDP ratio is multiplied by 365. **4)** (M) Moody's, Fitch (F) and (S) Standard and Poor's. The quality can be (3) middle-upper, (4) middle-lower, (5) degree of non-speculative investment and (6) highly speculative. **5)** Current revenue used are those published by IGAE, in accordance with the methodology of the ESA 2010. **6)** The current revenues correspond to 2016. **7)** Indicator S1 is defined as the average primary balance between 2017-2030 to achieve the goal of 13 per cent of GDP in 2030.

Latest data obtained on 28 March 2018.

GRAPH 1. CONTRIBUTION TO THE VARIATION OF GENERAL GOVERNMENT DEBT BY SUB-SECTOR (% OF GDP)



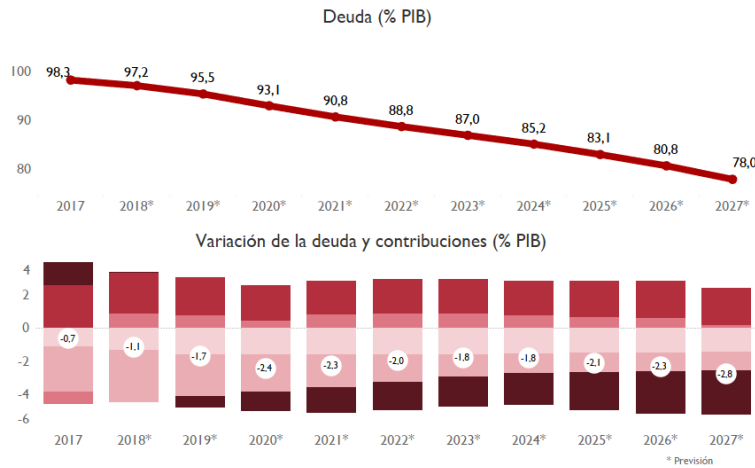
- The latest data published by the Bank of Spain put the debt at the end of 2017 at 98.3% GDP, 0.3 percentage points below the figure recorded in the previous quarter.
- In the last quarter of 2017, the CA and the SFF reached a debt-to-GDP ratio of 71.1%, slightly below the last quarter. For the regions as a whole, the debt-to-GDP ratio rose 0.1%, following the decline recorded in the third quarter, to stand at 24.8% GDP, while for the LG subsector, the ratio continued to decline to stand at 2.5% GDP, the lowest level of the past two decades.
- The AIReF baseline scenario envisages that the debt-to-GDP ratio will be reduced by 7.5 percentage points accumulated in the next 4 years, dividing the effort between the CA+SFF sub-sector and the regions in similar proportions.

You can access the interactive version of the chart by clicking on the image

Source: INE, Bank of Spain and AIReF estimates

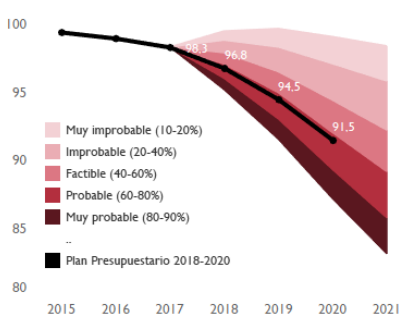
GRAPHS 2, 3 AND 4. EVOLUTION OF THE DEBT-TO-GDP RATIO AND SENSITIVITY ANALYSIS

THE DEBT DYNAMICS AND DETERMINANTS, BASELINE SCENARIO (% GDP)

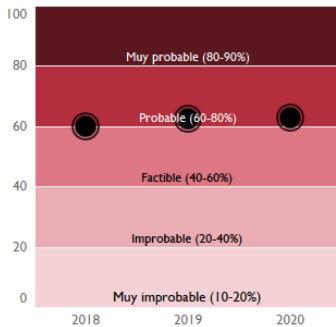


- The baseline scenario projects a mild but steady decline in the debt-to-GDP ratio over the next 10 years, remaining at the limit of 78% GDP in 2027. The GG's achievement of the reference value of 60% GDP is delayed until 2035.
- In the baseline scenario, the slowdown in economic growth is matched by a gradual improvement in the primary balance. For its part, the interest burden remains relatively stable, at slightly above 2% GDP.
- Moderate macro-financial shocks do not substantially affect debt dynamics, but if the process of fiscal consolidation is halted, sustainability may be compromised.
- Debt forecasts contained in the 2018-2020 Draft Budgetary Plan follow the same decreasing trend as the forecasts of the AIREF baseline scenario for the period, although with an estimated 60% probability that the debt will end up being higher than the official forecast.

Objetivos Plan Presupuestario 2018-2020 y probabilidad de incumplimiento (Ratio de deuda mayor que la senda objetivo)



Probabilidad de que la ratio de deuda sobre PIB sea mayor que la prevista en el Plan Presupuestario



You can access the interactive version of the chart by clicking on the image

Source: INE, MINECO, Bank of Spain and AIREF estimates

GRAPHS 5 AND 6. INDICATORS OF REGIONAL PER CAPITA DEBT (NUMBER OF DAYS)

Días necesarios para pagar la deuda autonómica (2018)



Días necesarios para pagar la deuda común (2018)

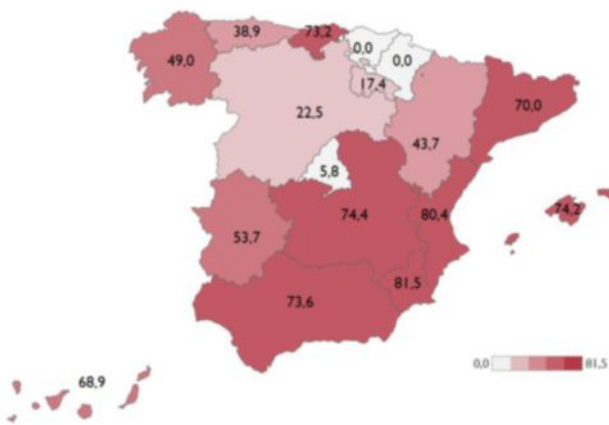


You can access the interactive version of the chart by clicking on the image

Source: AIREF **Note:** The days required per person to pay the debt in the regional case are derived by multiplying the regional debt-to-GDP ratio by 365. The common debt (CA and SFF plus LG) is distributed regionally based on the size of the population of the region, so that the resulting regional debt-to-GDP ratio is multiplied by 365.

GRAPHS 7, 8 AND 9. DEPENDENCE ON STATE FUNDING AND ESTIMATED ARRIVAL AT REFERENCE LEVEL

Mecanismos Extraordinarios de Financiación como % de la deuda regional (2017 T-IV)



You can access the interactive version of the chart by clicking on the image

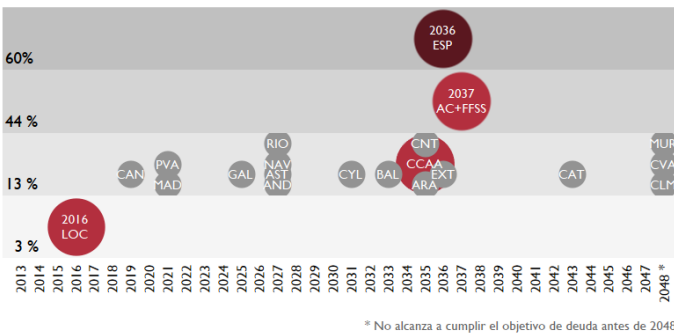
Source: Bank of Spain and AIReF estimates

Riesgo de sostenibilidad financiera de las CCAA



- It is expected that, in 2018, the inhabitants of a region would need to spend 88 days of work on average to repay the entire debt. In PVA or MAD that figure is around 50 days and is double this in BAL and MUR. This figure exceeds 120 days in CAT and CLM, reaching 151 in the case of CVA.
- The weight of regional funding has increased both in absolute (surpassing €166 billion) and in relative terms. Funding mechanisms in 2017 accounted for more than 90% of the total issuance in CLM, CNT, CAN, MUR, GAL and ARA.
- The 65% of the total regional funding in 2017 belongs to three regions. CAT (28% of the total), CVA (20%) and AND (17%).
- The medium-term risks for regional debt sustainability remain high. The regions present inconsistencies, which remain unchanged since last quarter, highlighting CAT, CLM, MUR and CVA with very high risk. At the other end, NAV and RIO have low sustainability risks, along with CAN, MAD and PVA.
- It is estimated that the regional sub-sector will not achieve a debt level of less than 13% of GDP before 2036 in the baseline scenario. CAN, PVA and MAD will be the first regions to reach the reference level set in the Stability Law.

Año estimado de cumplimiento del objetivo de referencia

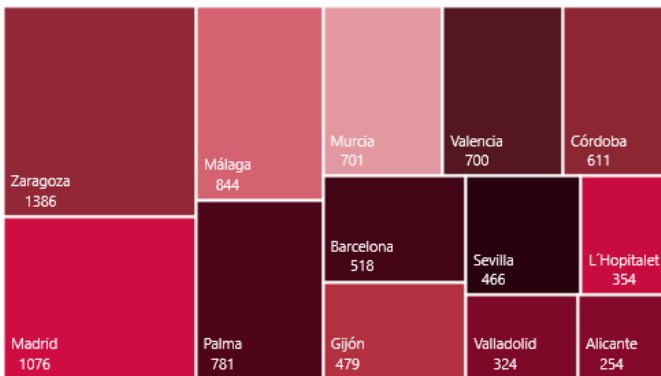


You can access the interactive version of the chart by clicking on the image

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

GRAPH 10. LOCAL GOVERNMENT SUB-SECTOR DEBT

DEBT PER CAPITA IN 2017 - MUNICIPALITIES OVER 250 THOUSAND PEOPLE (IN EUROS)



Source: Bank of Spain, municipalities and AIReF estimates.

Note: The debt-to-GRP ratio is calculated as the quotient of the debt burden on the population as of January 1st. The outstanding debt at the end of 2017 of Guipúzcoa, Vigo and L'Hospitalet de Llobregat was provided to AIReF directly by the city council.

- At the sub-sector level, it is expected that the debt ratio remains below the reference level of 3% of GDP.
- There are large disparities in the indebtedness of the large municipalities (over 250 thousand inhabitants), Zaragoza and Madrid being the most indebted in per capita terms, while Bilbao, Las Palmas and Vigo are the least so.
- The primary balance recorded in 2017 has helped to reduce the debt of the subsector in absolute terms by 10% (€3.3 billion).
- Since the end of 2012, LG deposits have nearly doubled in terms of GDP (2%), surpassing €20 billion. In this way, the net debt of liquid financial assets is close to 0.5% GDP.