



SINDICATURA DE COMPTES
Illes Balears

Auditing Debt Sustainability: Balearic Islands 2016

Joan Rosselló-Villalonga

EURORAI, May 17th, 2019. Warsaw

Auditing debt sustainability: Balearic Islands 2016

1

Debt sustainability versus debt legitimacy

2

Fiscal discipline and Debt sustainability analysis

3

The distribution of debt targets across public administrations and regional governments

4

Difficulties of the analysis

5

Results

6

Conclusions

1

Debt sustainability versus debt legitimacy

The Regional Parliament of the BI approved to ask the SCIB to elaborate a report aimed at analyzing the sustainability of public debt of the BIs' Regional Government.

There was a previous debate on whether the analysis on the legitimacy of public debt should be included in the report. This proposal was finally rejected on the basis that the legitimacy of public debt is a vague economic concept and the matter was considered to be beyond the scope of the SCIB.

The goal of the report was neither auditing the compliance of fiscal discipline nor auditing all debt operations, which is done yearly, but to assess risks to debt sustainability given the sharp increase of public debt in the Balearic Islands since 2004.

The report was approved by the SCIB in December 2017 and presented to the Parliament of the BIs' in April 2018.

Fiscal discipline and Debt sustainability analysis

Fiscal stability is one of the pillars of the functioning of the EU. Compliance with budgetary discipline is examined on the basis of deficit and the Debt/GDP ratio of each Member State.

Debt Sustainability refers to the capacity of an economy to face debt and interest repayments in the long run.

Debt Sustainability Analysis (DSA) includes issues like:

- Debt levels and Debt Dynamics
- Feasibility of maintaining primary surpluses

DSA framework also includes studying indicators aimed at capturing both:

- Short-run liquidity risks: net financing risks
- Medium to longer-run solvency risks:
 - Public debt maturity structure
 - Scope for contingent liabilities
 - Net financial position of the economy, governance and political risk.

3

The distribution of debt targets across public administrations and regional governments

The EU establishes that deficit and debt targets are to be achieved on national terms, which means considering all public administrations in a country.

As a consequence, in countries with federal regimes the issue of allocating budget deficit targets between different levels of administration and within the agents in the same level of administration arises.

In Spain this distribution is effectively decided by the CG, which **self assigns** the greatest share of the deficit target (80-90% although it is responsible for less than 50% of total expenditure) and which decides that all regions will have to achieve the same deficit target (in terms of GDP), regardless of their economic situation. This is also so concerning the restrictions on public expenditure growth (the limit being the National GDP growth rate, regardless of each region's GDP growth rates)

On the contrary, debt targets are **assigned according** to the debt burden from the past.

4

Debt sustainability analysis

- There is no simple rule allowing to determine whether government debt is, in practice, sustainable or not. Although we do not question the current debt target (60% GDP), we must recall the situation in Italy, Belgium, etc, in which the ratio has been above 100% for decades.....
- DSA analysis is clearly conditioned to dynamic debt, which typically relies on long-term projections of gross debt, interest rates, primary surpluses, etc. Given that these projections are beyond the scope of the SCIB we use projections made by the AIREF (Independent Authority for Fiscal Responsibility)
- Debt sustainability of government debt requires the accumulated debt to be serviced at any point in time. This requires that the government is both solvent and liquid.
- Economic Theory provides a practical definition of sustainability that captures both solvency and liquidity in a measurable and policy-relevant way.

4

Debt sustainability analysis

- Debt sustainability is a macroeconomic term that is based on the identity:

$$\Delta B = G_t - T_t + iB_t$$

- where B is public debt, G is Public Expenditure (excluding debt service) and T are Tax Revenues. i refers to the interest rate.
- In GDP terms, continuous time, and assuming constant t and g growth rates, the previous expression becomes

$$\dot{b} = g_t - t_t + \frac{(i - \dot{y})}{(1 + \dot{y})} b_t$$

- The solution to this differential equation provides the conditions for debt sustainability.

4.1

Debt sustainability analysis

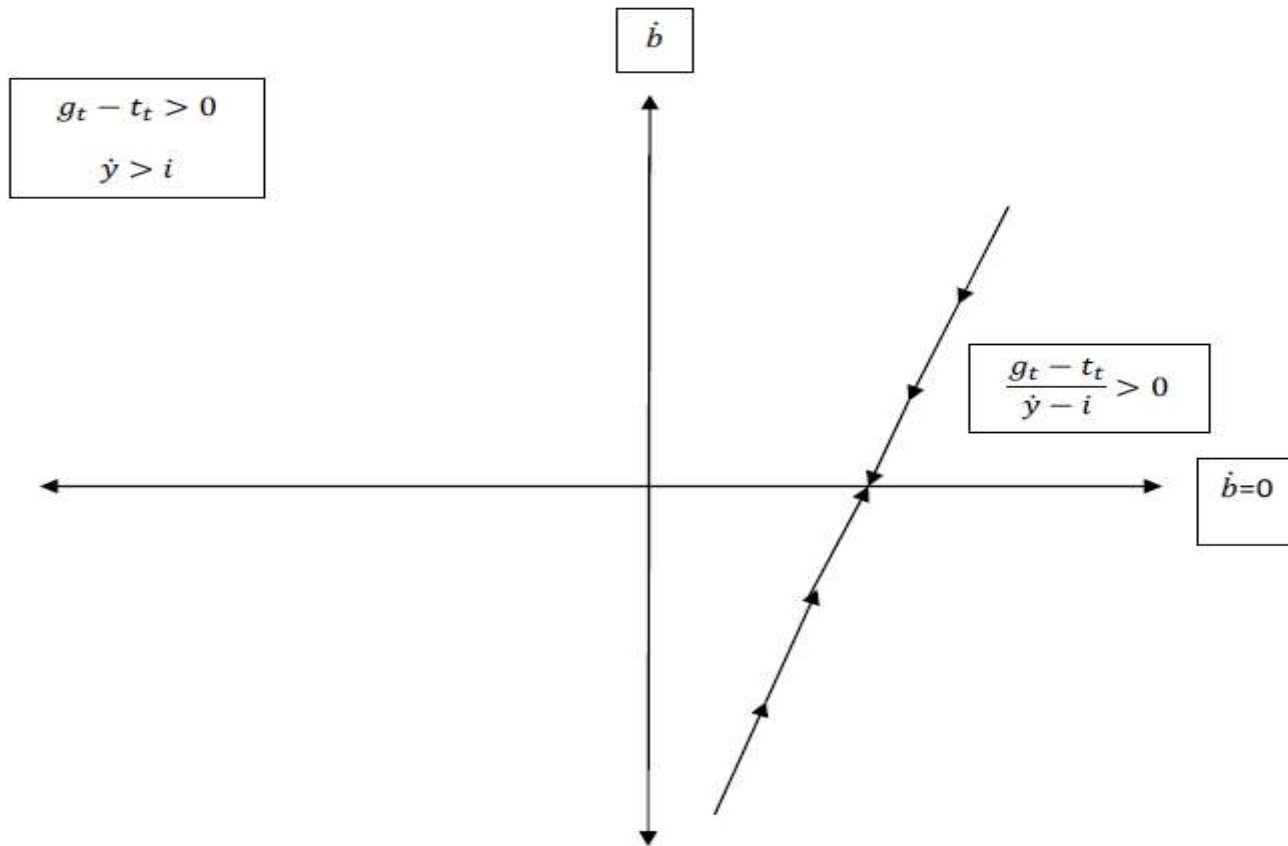
- $\dot{b} = 0$ indicates a condition of equilibrium for any level of deficit or surplus

$$b_t = (g_t - t_t) \left(\frac{\dot{y} + 1}{\dot{y} - i} \right)$$

- which means that any position of deficit or surplus might be sustainable as far as $\lim_{t \rightarrow \infty} b_t = 0$
- Therefore, from a dynamic perspective, any Debt to GDP ratio will be sustainable as far as $\dot{y} > i$ and unsustainable otherwise.
- This means also that a Gov. is solvent if it is able to generate sufficient primary budget surpluses in the future to pay its outstanding debt.

4.2

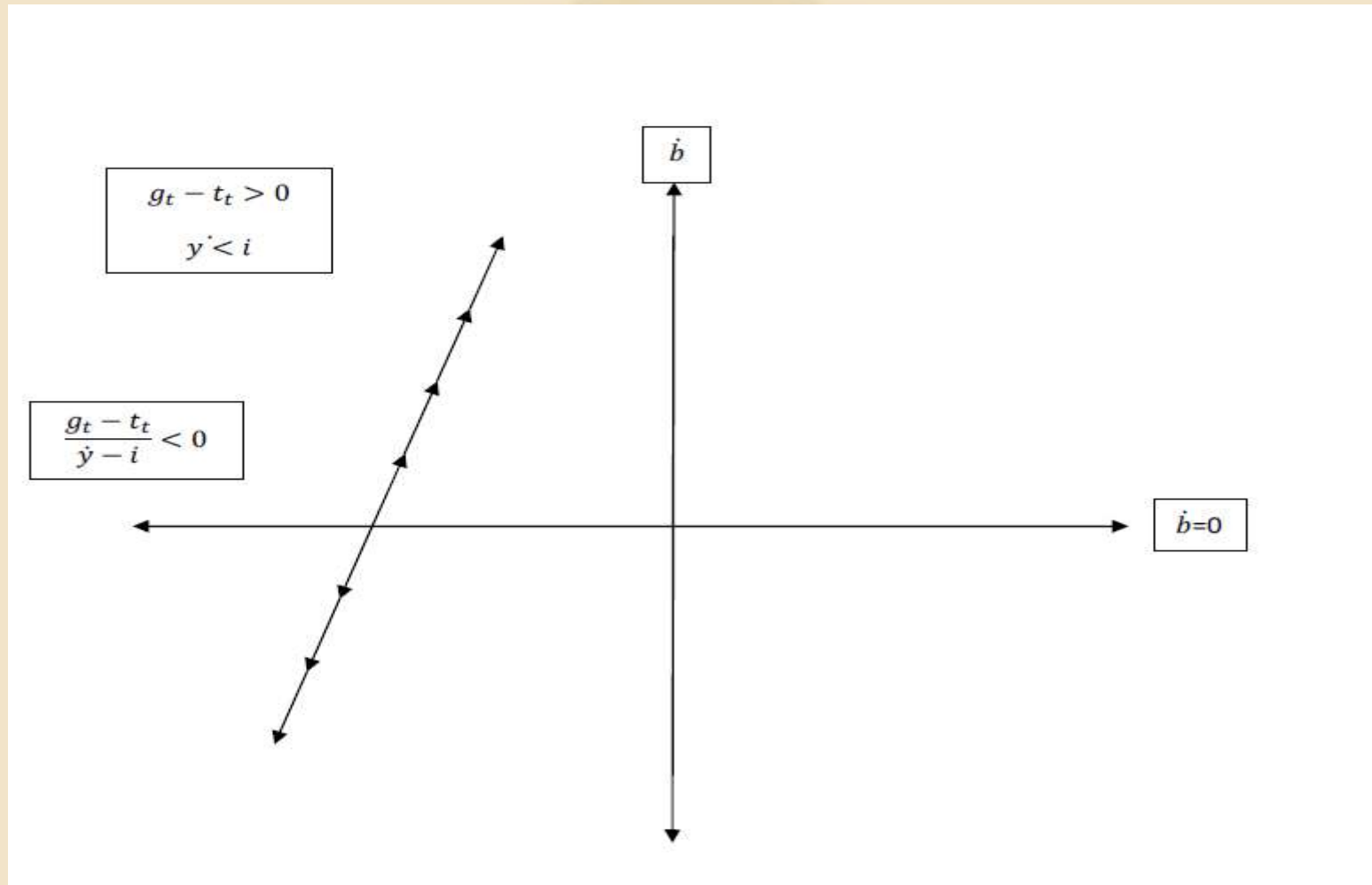
Condition for sustainability of public debt (in a situation with unbalanced budget)



Auditing debt sustainability: Balearic Islands 2016

4.3

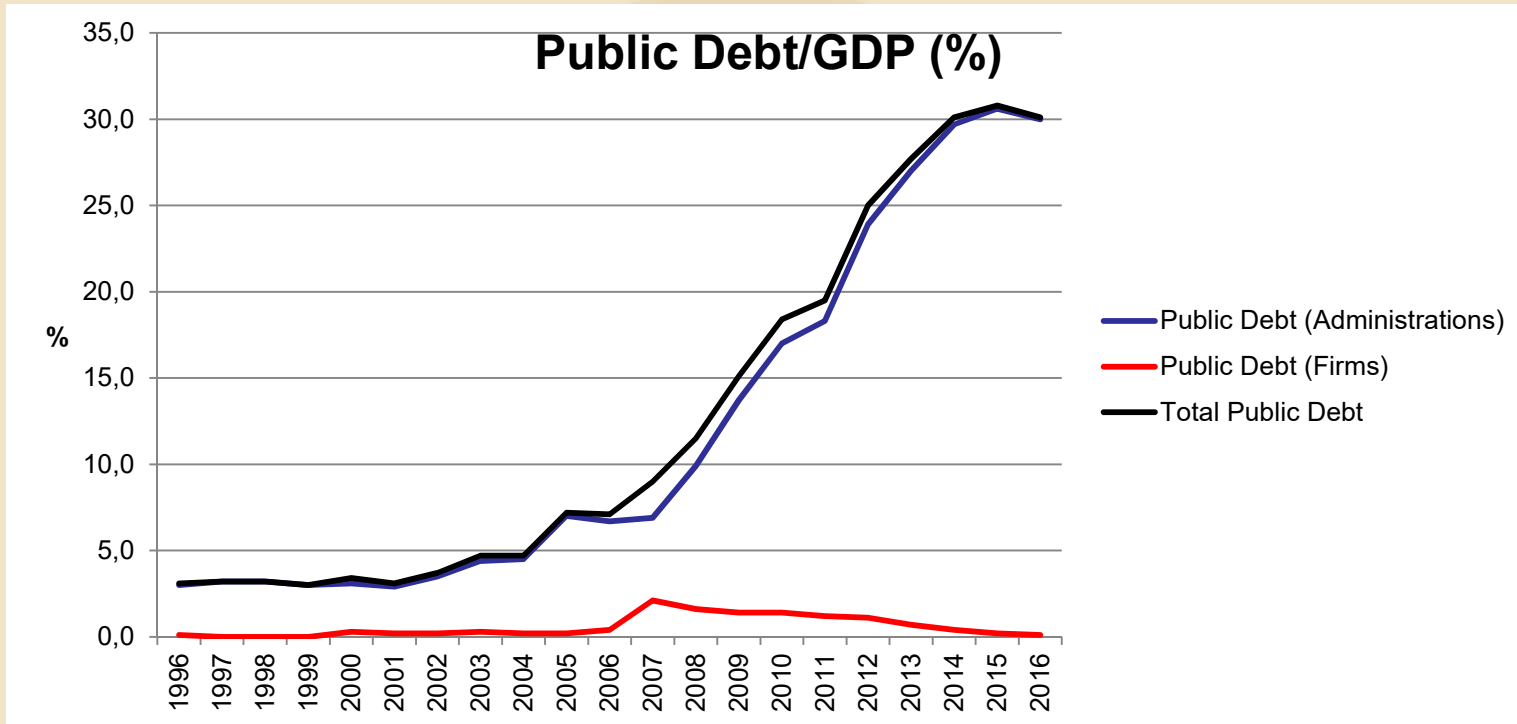
Condition for unsustainability of public debt (in a situation with unbalanced budget)



Auditing debt sustainability: Balearic Islands 2016

5.1

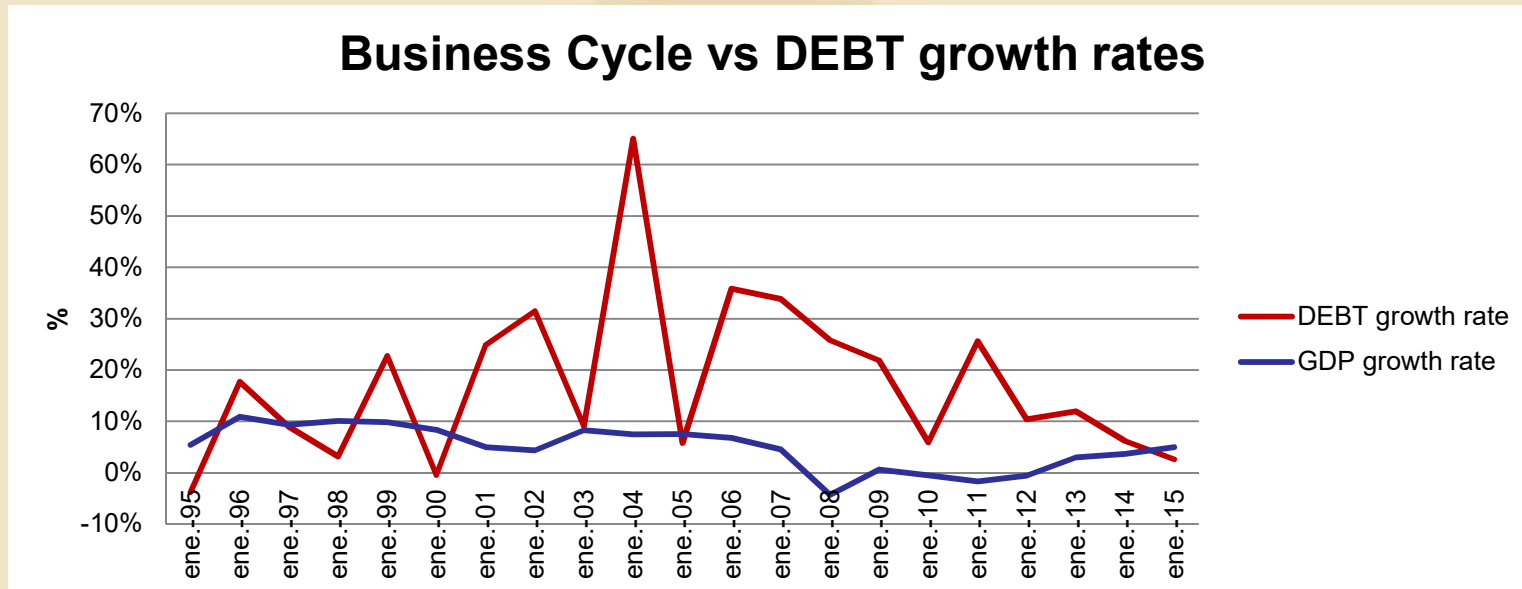
Some data: Balearic Islands 1996-2016



A continuously rising debt path is usually taken as a clear sign of unsustainability.

5.2

Is public debt anticyclical?



According to the previous data, we can observe that public debt has increased since 2004, even during periods when GDP has also increased significantly (based on Intergenerational Equity arguments?).

6

Difficulties of the analysis

- Debt and deficit targets are fixed in National Accounts terms (ESA-2010), which introduces relevant difficulties when elaborating and executing public budgets according to those targets.

This is rather relevant in RGs, because National Accounts statistics and methodologies are beyond their responsibility. Finally, we must remark that data is only available at $t+1$.

- The definition of public debt that is considered when analyzing Debt/GDP restrictions is not a unique one. The main data source is the Bank of Spain (BdE), which does not consider all available debt instruments (commercial debt is excluded). In addition to that, the Internal Control Audit Office (IGAE) introduces some corrections to the BdE data, according to their own criteria, which is not known ex-ante by the RGs.

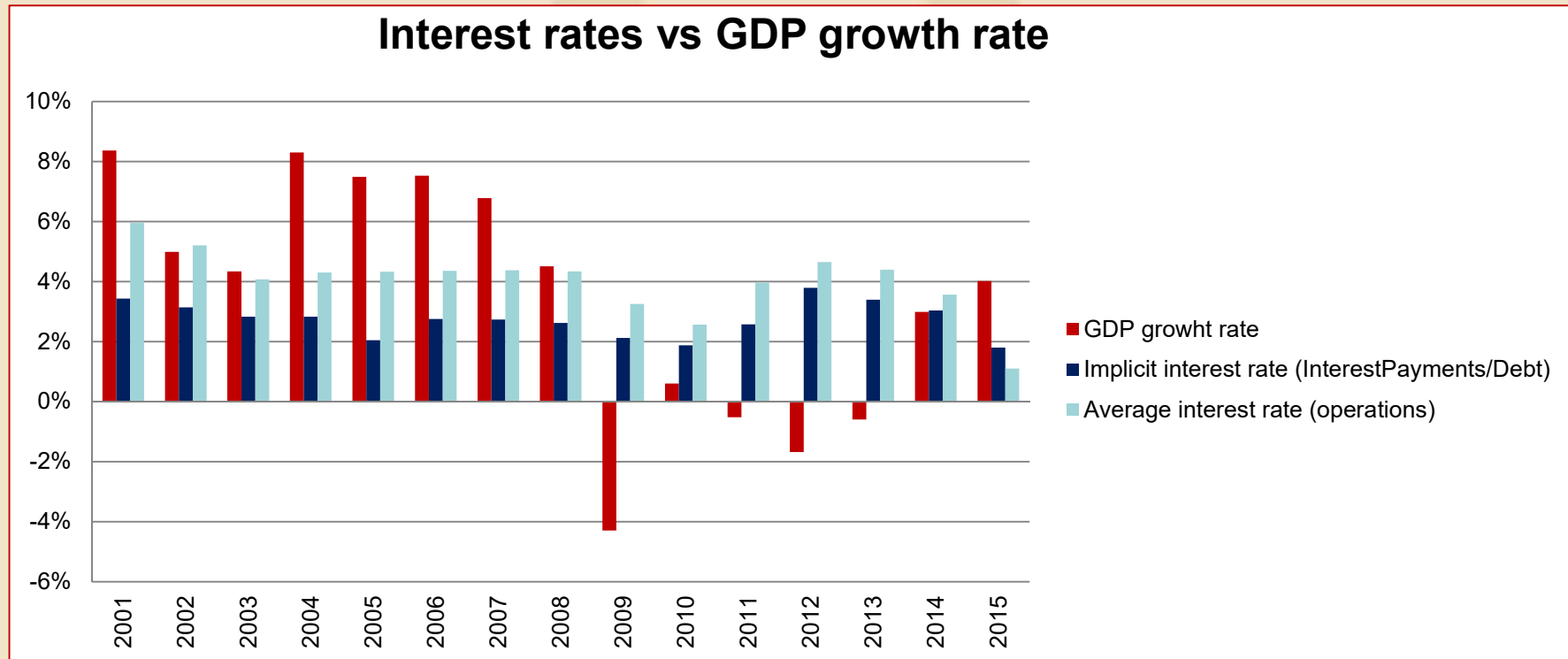
- In our report, we used data from the BdE and we considered all debt instruments available. All debt operations have been audited by the SCIB and debt levels reported by the RG have been checked to those provided by the BdE.

Auditing debt sustainability: Balearic Islands 2016

7.1

Results (long term)

From a long-term perspective, the first items to be analyzed are GDP growth and market interest rates.



7.2

Results (long term)

Average Implicit interest rate 2001-2014:	2.7%
Average GDP growth rate 2001-2014:	3.6%
Cumulative Average Growth rate 2001-2014	3.2%

According to these data, it seems that the debt sustainability condition holds.

However, some doubts arise when we take into account the average Interest rate (considering all debt operations) 2001-2014: 4.0%.

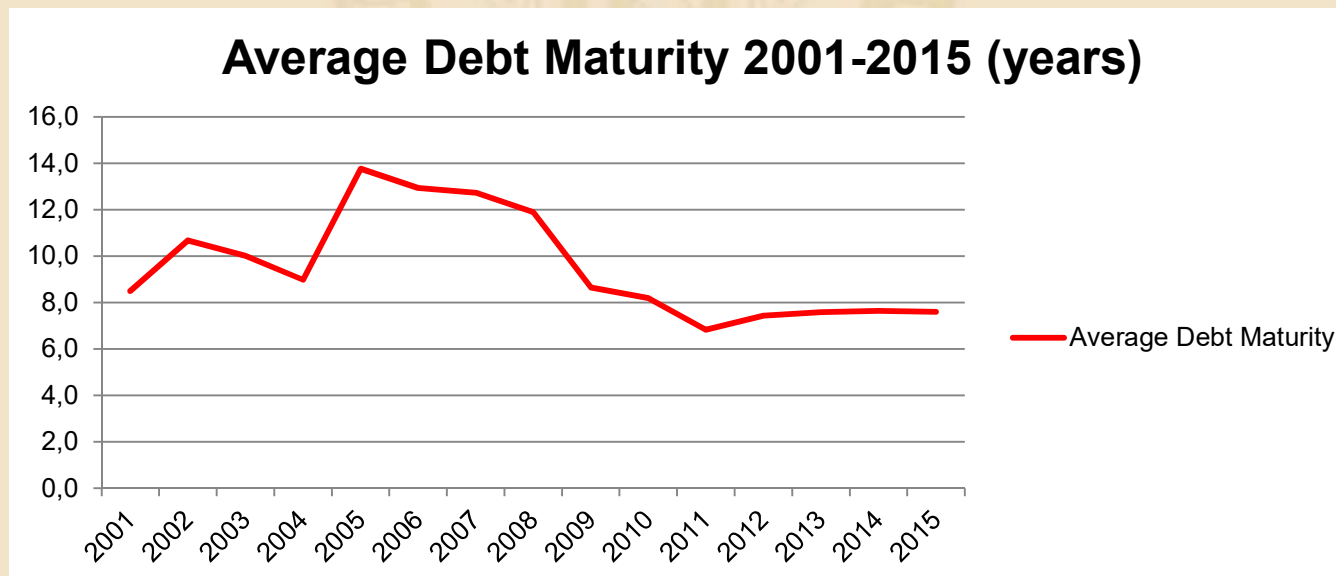
This inconsistency is a clear indicator of the difficulty to test the achievement of the sustainability condition in the long term (together with the fact that the initial hypothesis are not satisfied: constant T and G growth rates).

7.3

Results (medium term)

Although sustainability is a long-term target, in the short/medium term there are some circumstances that might introduce relevant difficulties to achieve that target: we refer to the maturity of debt, the schedule of debt repayments, etc.

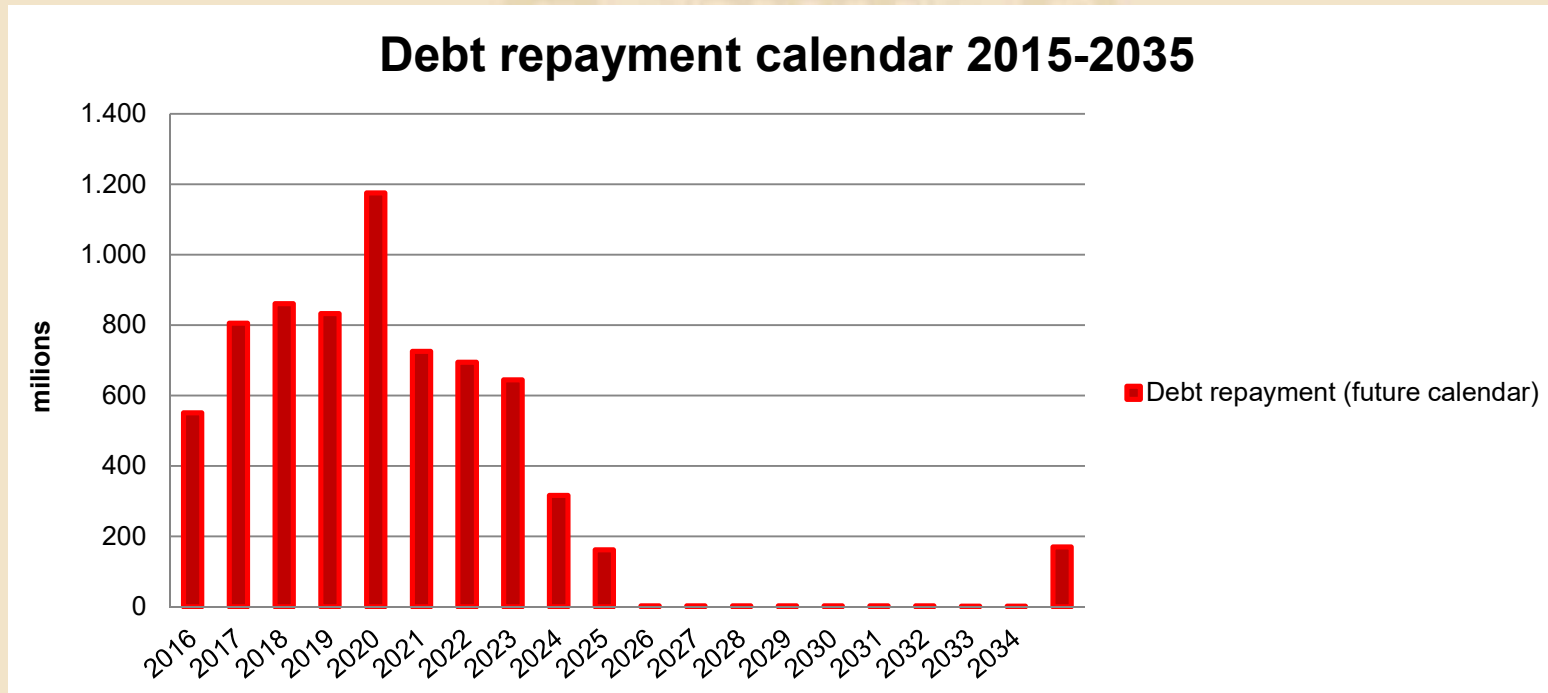
In particular, we observe that the average debt maturity has decreased significantly, which means that debt operations must be repaid/renewed in shorter periods.



7.4

Results (medium term)

In addition to that, scheduled debt repayments suggest that some operations could not be cancelled at maturity date and that they might have to be refinanced (which implies potential liquidity tensions). Being able to satisfy scheduled debt repayments at maturity date would require achieving an enormous primary surplus, which is very unlikely.

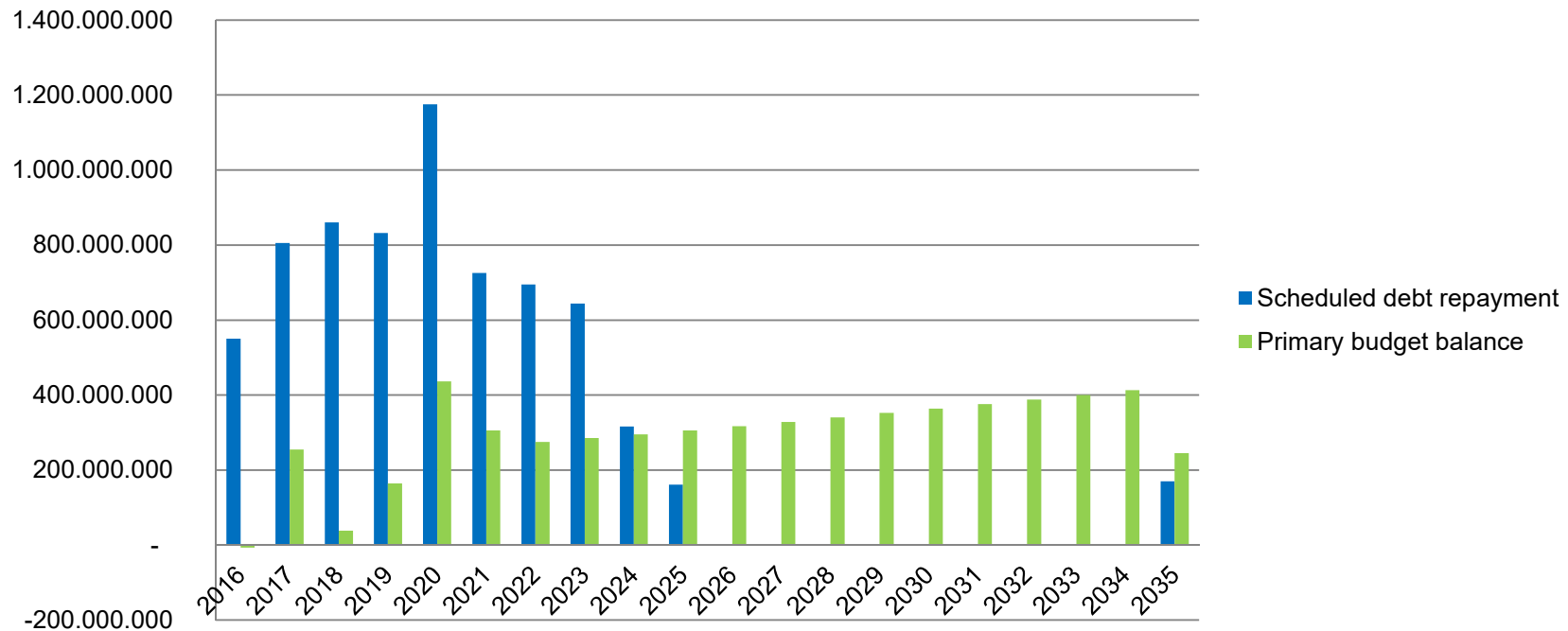


7.5

Results (short/medium term)

Financial stress is also corroborated when comparing the scheduled debt repayment with the primary budget balance projections (by AIREF)

Scheduled debt repayment vs Primary surplus (Euro)

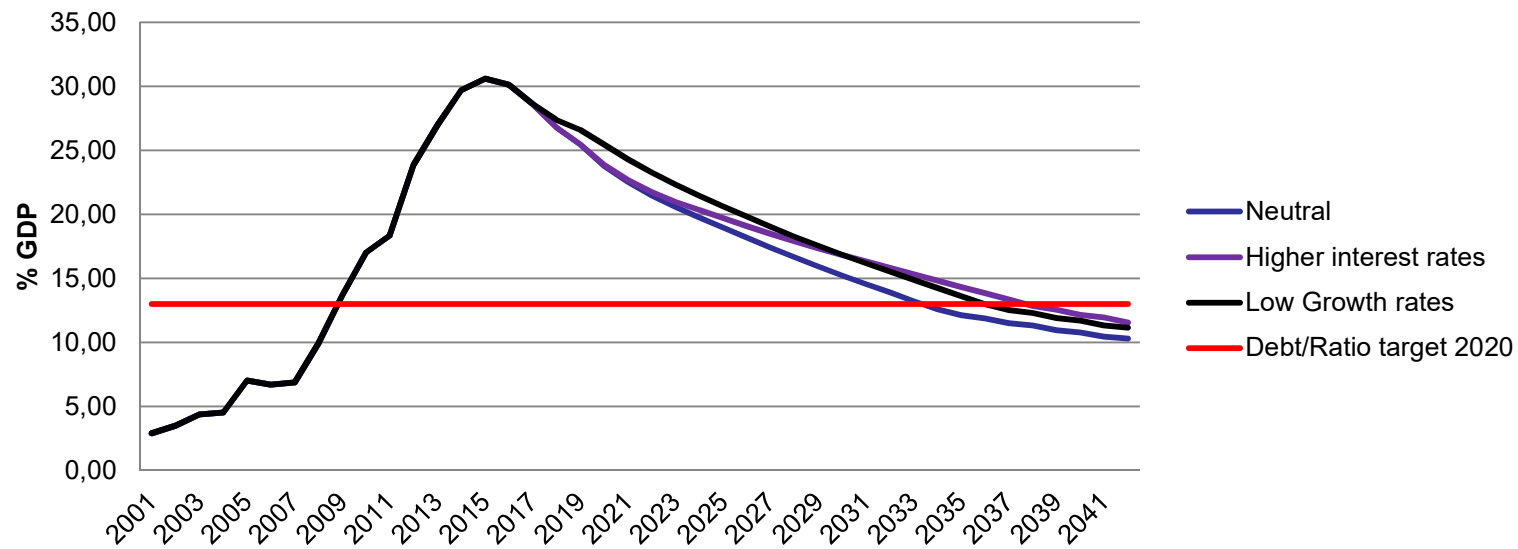


7.6

Results (short/medium term)

More specifically, according to AIREF projections, Debt/GDP target (13% to be achieved by 2020) will be achieved by 2034, at best.

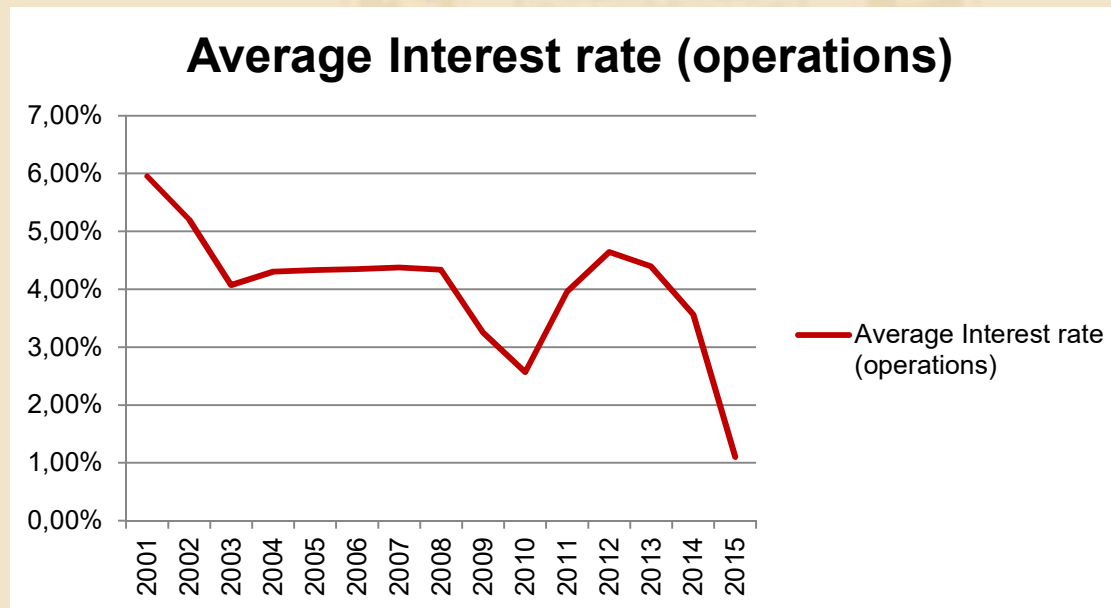
Estimations Debt/DGP ratio versus target 2020, different scenarios



7.7

Results (short term)

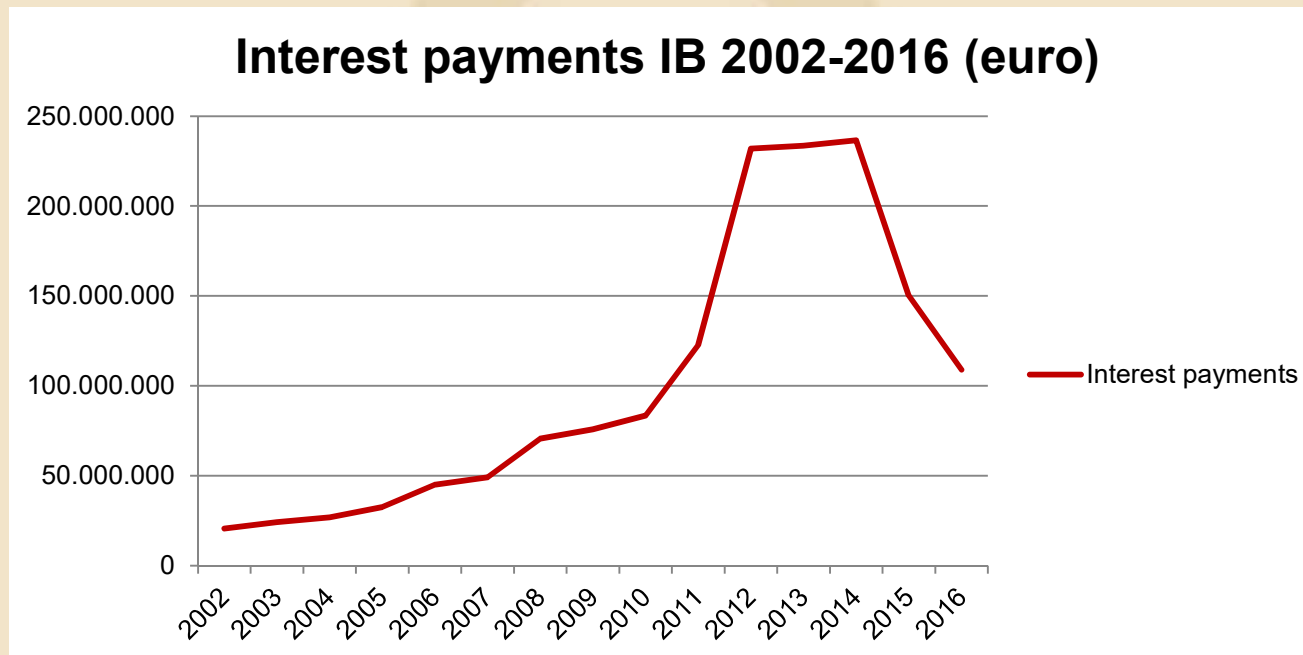
On the contrary, we must note that the interest rate of new debt operations has decreased sharply, which means that the burden of interest payments is decreasing. This reduces the possibility of liquidity tensions in the short term.



7.8

Results (short term)

As a consequence interest payments are decreasing sharply:

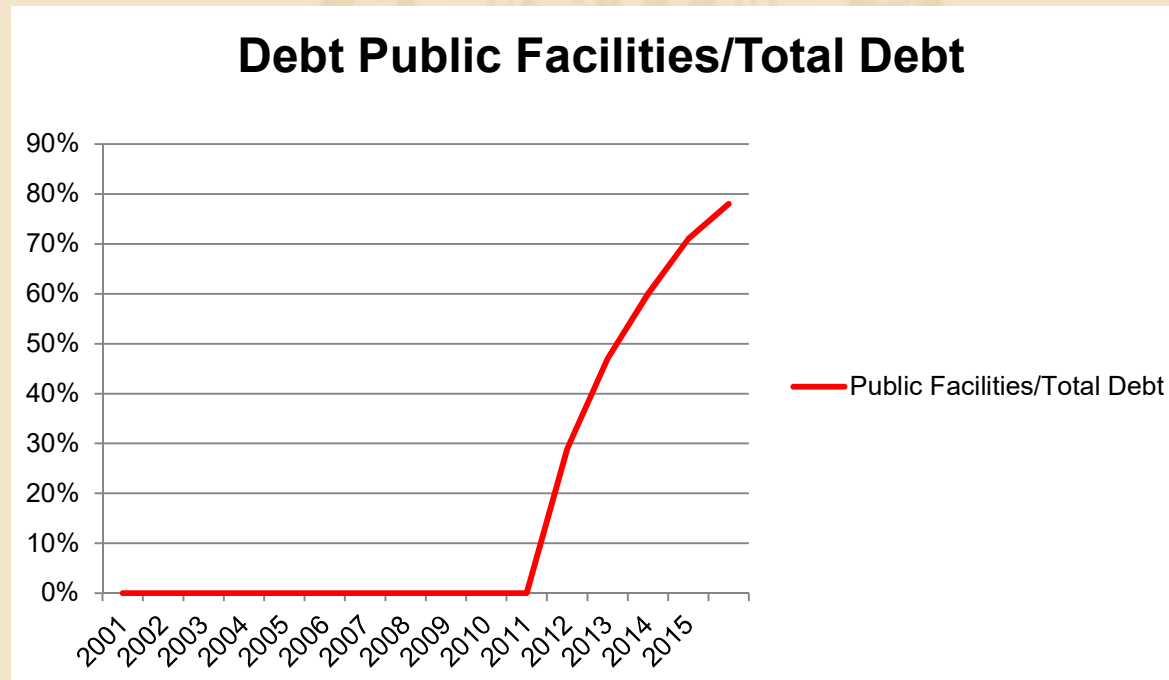


7.9

Results (short/medium term)

Decreasing interest rates are explained by the fact that from 2012 the CG has provided several financial facilities that allowed RGs to have access to public debt under much better conditions (in fact, financial markets access was closed to most RGs).

The question is for how long this situation will hold.



Conclusions

Although the SCIB audits Debt operations of Regional Gs and Local Gs regularly, auditing debt sustainability is rather complex, both from a theoretical and an empirical perspective.

There are several difficulties to test the sustainability of debt:

- There are several “official” definitions of public debt. Official data refer to debt operations only, excluding other financial instruments which represent a debt burden to RGs, effectively (commercial debt, assignment of accounts receivable, that derived from Public Private Partnership projects, etc)
- Sustainability of Debt is a concept that should be achieved in the long term. However, it requires the surveillance on some short to medium-term indicators (consolidation path). These rules are settled in terms of National Accounts, according to dynamic criteria that are unknown ex-ante by RGs.

8

Conclusions

- Long-term debt sustainability (solvency) is compatible with short and medium term financial stress (liquidity). The intensity of that stress can make a country more prone to liquidity crises and defaults, which could lead eventually to the need of a bailout. This cannot be neglected in the auditing process.
- The expansionary monetary policy by the ECB has facilitated access to credit by RG at insignificant interest rates. The question is for how long this policy can be sustained and which will be the effects on interest rates and interest payments by RGs
- Given that Debt sustainability is referred to the long term, all the analysis is surrounded by high uncertainty.

Auditing debt sustainability: Balearic Islands 2016

Thanks for your attention

Warsaw, May 17th 2019.