

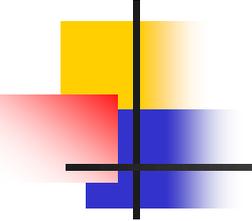
# Economics and Public Finance

## Tutorial P11

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- Topics:
  - Budget constraint, and Public Debt Sustainability
  - Fiscal policy in the context of EMU
  - The Stability and Growth Pact
  - The Stability and Growth Programme
  - The excessive deficit procedure.

- “The reform of economic governance in the euro area – essential elements”. ECB Monthly Bulletin, March 2011, pp. 99-119.
- Glossary of Public Finance terms.

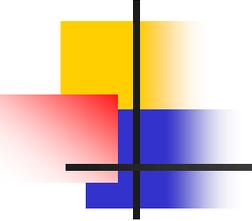


## Multiple Choice Question - 1

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Say which of the statements is false. Government debt:

- a) Changes from year to year.
- b) Is a stock variable.
- c) One way of using private resources to finance public deficits.
- d) Is given by the difference between effective revenue and effective expenditure.

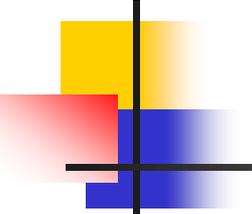


## Multiple Choice Question - 2

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The issuance of government debt in a given year equals:

- a) The net borrowing requirements.
- b) The gross borrowing requirements.
- c) The budget deficit.
- d) The redemption (amortization) of government debt.

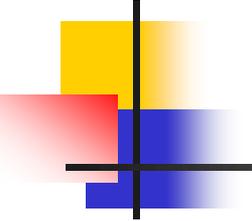


## Multiple Choice Question - 3

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The government budget constraint of a country that cannot issue money and does not sell financial assets to finance the budget deficit, obeys the following condition:

- a) The change in the debt ratio is equal to the total budget balance.
- b) The change in the debt ratio is equal to the symmetric of the total budget balance.
- c) The change in the debt ratio is equal to the primary budget balance.
- d) The change in the debt ratio is equal to the symmetric of the primary budget balance.

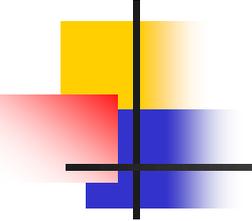


## Multiple Choice Question - 4

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Which statement is false regarding the Stability and Growth Programme:

- a) Sets medium-term objectives for a fiscal situation close to balance.
- b) Defines an adjustment path for the medium-term objectives.
- c) Forecasts the economic developments.
- d) Sets limits to the budget deficit, 3% of GDP, and to the debt ratio, 60%, of the general government.

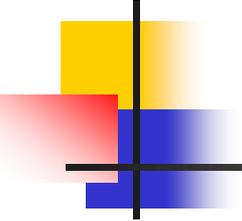


## Multiple Choice Question - 5

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The debt ratio in a given country is 140% of GDP in  $t$ . Given the adjustment speed of the debt ratio in the context of the Fiscal Stability Treaty, which should be the debt ratio in  $t+3$ :

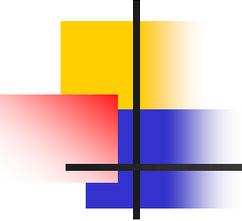
- a) 110%.
- b) 128%.
- c) 120%.
- d) 98%.



## Topics for discussion - 1

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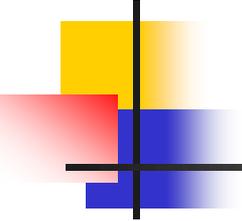
In the context of the government budget constraint, explain of which variables, and in what sense, depends the sustainability of government debt.



## Topics for discussion - 2

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- a) In the context of the Stability and Growth Pact, revised in 2005, mention succinctly its main underlying budgetary principles.
- b) Mention also which were the main changes approved in 2011 in terms of coordination and monitoring of Fiscal Policies in the EMU.

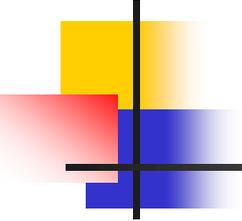


## Exercise - 1

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Consider the government budget constraint:  $\Delta b = d - nb$  ( $b$  – debt ratio;  $d$  – budget deficit, % of GDP;  $n$  – nominal growth rate of GDP). Countries A and B have the same nominal growth rate of 5%, and stabilize their debt ratios respectively at 160% and 100%.

- a) Compute the resulting budget deficit ratio for each country, and comment in the context of the SGP.
- b) What options are theoretically available for these countries to reduce the debt ratio?



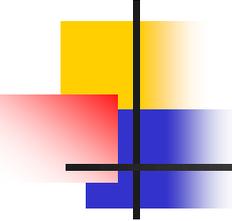
## Exercise - 2

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Consider the following data for GDP, government debt, and the budget deficit in a given country.

- a) If the budget balance were to be kept at the same level as in 2010, and the same were also true for nominal growth, would public finances be sustainable? Justify.
- b) Assuming that in the next decades the nominal growth rate will be 2,5% and that the implicit nominal interest rate for government debt will be on average 3,75%, compute the total and the primary budget balance consistent with a convergence of the debt ratio to 60%.

## Exercise - 2



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Million euros	2010	2011
Net borrowing requirements	-14911.6	-8046.3
Government debt	159469.1	168756.6
GDP	172546.3	173476.5
Net borrowing requirements (% of GDP)	-8.6	-4.6
Government debt (% of GDP)	92.4	97.3
GDP nominal growth rate	2.33	0.54