

Public Finances in the Economic and Monetary Union (PFEMU)
ISEG - School of Economics and Management

Exam, 11 January 2019 - **Duration: 2h**

- 1. The exam has two groups. The points for each question are mentioned alongside.**
- 2. ALL the questions in group ONE need to be answered.**
- 3. Choose ONLY 2 questions from group TWO.**
- 4. Only non-graphical calculators are allowed. It is not possible to use any reading material. During the exam, no clarifications can be made. It is not allowed the use of mobile phones or computers. Improper use will lead to cancellation of the exam.**

I

1. “The Sargent and Wallace analysis is a general case of the Leeper-Sims-Woodford analysis”. Comment the previous sentence and justify your answer. [3.00]

2. Consider the government budget constraint, in real terms,

$$B_t - B_{t-1} = r_t B_{t-1} + G_t - R_t \quad (1)$$

where, G – government spending without interest payments; R – government revenue; B – stock of outstanding government debt; r – real interest rate (notation as used in the class).

a) On the basis of (1), and mentioning the necessary assumptions, obtain (2) below. [1.50]

$$b_t = \frac{(1+r_t)}{(1+y_t)} b_{t-1} + g_t - \rho_t \quad (2)$$

b) Rewrite (2) in order to consider seigniorage and mention its effect on the debt path. [1.50]

3. Explain, both in terms of methods and of examples, how public spending efficiency can be assessed [3.00]

4. Consider the following data for the Stability Program of Germany:

	2018	2019	2020	2021
Nominal GDP (EUR billions)	1485000	1498000	1545000	1600000
Long-term interest rate (%)	3.0	3.0	2.8	2.5
Primary spending (EUR billions)	741114	740257	742960	746968
Total revenue (EUR billions)	775000	776100	777200	778800
Government debt (EUR billions)	1692800	1685780	1685000	1677500
Total spending (EUR billions)	791898	790830	790140	788905

a) Compute the primary balance and government debt in percentage of GDP in 2019, 2020, in 2021 and comment on the forecasted fiscal developments (present the calculations). [1.00]

b) For the period 2019-2021, assess the main determinants of fiscal sustainability. [1.00]

c) Explain if the forecasted fiscal adjustment is more based on the spending or on the revenue side of the budget. [1.00]

II

Answer ONLY 2 of the following 3 questions:

5. Within the framework of long-term determinants of fiscal policy:

- a) Categorize succinctly government liabilities. [1.00]
- b) Using that categorization how should the following examples be treated from the point of view of the government? Please give short explanations:
 - i) The government guarantees a loan given by a bank to a municipality. [0.75]
 - ii) The government injects capital into a private bank. [0.75]
 - iii) A flood affects large parts of the country. [0.75]
 - iv) The government increases the forecast for future pension payments. [0.75]

6. Explain succinctly:

- a) When can Ponzi games work. [1.00]
- b) The likelihood of an expansionary fiscal consolidation to occur increases with the share of rationed consumers. Comment adequately. [1.50]
- c) The possible effects on sovereign ratings of a fiscal consolidation announcement. [1.50]

7. In the context of the Stability and Growth Pact explain briefly:

- a) The main characteristics of the so-called preventive arm; [1.50]
- b) The main characteristics of the so-called corrective arm; [1.50]
- c) The relevance of the MTO. [1.00]