

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

Exam, 3 February 2016 - **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. 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]

2. Based on the data for the Stability Program of country X:

a) Compute the change in the primary balance ratio in 2017 and in 2018, in percentage points of GDP (present the calculations). [1.50]

b) For the period 2017-2018 assess the composition of the proposed fiscal adjustment and also the sustainability of public finances. [1.50]

Country X	2016	2017	2018	2019
Nominal GDP (EUR billions)	1500,0	1530,0	1575,0	1635,0
Long-term interest rate (%)	4,00	4,25	4,25	3,75
Short-term interest rate (%)	2,00	2,00	2,50	2,75
Primary spending (EUR billions)	596,3	610,0	615,0	620,0
Interest payments (EUR billions)	36,0	38,7	39,1	34,9
Total revenue (EUR billions)	577,5	585,0	610,0	625,0
Government debt (EUR billions)	900,0	910,0	920,0	930,0

3. Explain the similarities and the differences between the Sargent and Wallace setup, the Leeper-Sims-Woodford analysis, and the orthodox view of price determination. [3.00]

II

Answer ONLY 2 of the following 3 questions:

4. Assume you just received these figures for growth and public finances in the coming years as represented country's Y fiscal notification and the Commission's forecast.

- a) Does the country breach the reference values for the deficit and debt and what can we say about the MTO? [1.00]
- b) What is the implicit rule of thumb that can be uncovered in the projected real growth and budget balance developments? [1.00]
- c) Which steps under the corrective arm of the SGP should now be undertaken? [1.00]
- d) Formulate three elements of a Council recommendation under the corrective arm that are in line with the SGP. [1.00]

Country Y	2015	2016	2017	2018	2019
Real GDP growth (% change)	1,00	0,50	0,00	-1,00	-1,50
General government balance (% of GDP)	-3,00	-3,25	-3,50	-4,00	-4,25
Cyclically-adjusted balance (% of GDP)	-2,20	-4,00	-4,75	-5,00	-5,50
Government gross debt (% of GDP)	65,00	68,25	71,75	75,75	80,00

5. In the 2008-2009 economic and financial crisis many observers have called for a more active role of the government in stimulating the economy.

- a) Please describe the classification of fiscal impulse measures on the economy. How can the size of the individual components be quantified? [1.50]
- b) What are the major advantages and disadvantages of using discretionary fiscal policies, notably vis-à-vis other mechanisms? [1.50]
- c) What are the pre-requisites for discretionary policies to be effective in stimulating demand? [1.00]

6. In recent months, yield spreads on government bonds of the individual euro area countries mostly decreased.

- a) What are the main underlying factors that have been found to drive bond spreads? [1.50]
- b) What aspects of governments' financial strength are captured by the ratings as provided by the major ratings agencies? [1.50]
- c) What impact can financial market developments have on the conduct of fiscal policies and on the compliance with the provisions of the SGP? [1.00]