5. Government and Public Finance

Problem 5.1.

Direct taxes are different from indirect taxes because:

A) direct taxes are levied on income and wealth and have an immediate effect on the consumption and savings of economic agents

B) direct taxes are levied on the traded goods and services and thus affect all individuals and firms

C) direct taxes are comparatively easy to implement because they can be collected from the sellers of goods and services.

Problem 5.2.

The current budget balance will tend to increase if:

A) Interest payments on public debt increase

B) public consumption increases

C) public consumption decreases

Problem 5.3.

The tax function

$$T = 50 + 0{,}3Y$$

Where the variables have the usual meaning, means that the tax is:

A) progressive

B) regressive

C) proportional

Problem 5.4.

Label the following taxes as *direct* taxes (on income, on wealth) or *indirect* taxes:

A) IRS (Income Tax)

B) VAT (Value Added Tax)

C) IRC (Corporation Tax)

D) ISP (Tax on Petroleum Products)

E) IMI (Municipal Property Rates)

F) IABA (Tax on consumption of alcohol and alcoholic beverages)

G) IUC (Road Tax)

Problem 5.5.

Label the following State expenditures as *current* or *capital*:

A) expenditures on public debt interest payments

B) construction of a hospital

C) remuneration of civil servants

D) purchase of gasoline for ministerial cars

E) purchase of felt tip pens for ISEG teachers

F) construction of a new amphitheater at ISEG

Problem 5.6.

- For a closed economy the following information (in monetary units) is known:

- Public Debt at the end of year 0 = 500
- GDP m.p. in year 1 = 1500
- Transfers from the Government to Households in year1 = 150
- Current Budget Balance in year 1 = 35
- Nominal interest rate in year 1= 6% per year
    - In year 1, capital revenues are equal to capital expenditures.
    - The general price indexes for year 1 and year 0 are equal. The base year is year 0.

5. 6. a) Assuming that taxes are represented by the function *T=30+0.25Y*, compute the public consumption (G) for year 1.

5. 6. b) Calculate the households' disposable income for year 1. Assume that the households receive the interest from public debt as primary income.

5.6. c) Assume that the function of consumption is given by *C = 100+0.8Yd*. Calculate the private consumption and investment for year 1.

5.6. d) Compute the debt ratio for year 1.

Problems signalled with (*) were adapted from Santos et al. (2010):

Problem 5.7.*

Public consumption decreases if:

A) old age pensions decrease

B) the number of civil servants decreases but the pay rate per civil servant does

not change

C) fewer roads are built

D) the national contribution to the EU budget decreases

E) None of the previous statements is true

Problem 5.8.*

If the payment on interest is greater than the primary balance, this means that:

A) the current revenues are less than the current expenditures

B) the payment on interest is greater than total revenue

C) the revenue from taxes is low

D) the conventional (global) budget balance is negative

E) none of the above

Problem 5.9.*

What effects on the conventional (global) budget balance can be predicted from an increase in inflation?

Problem 5.10.*

Assume that the Government accounts include the following data for period *t*:

- Expenses excluding interest and debt payments in t : 80 m.u.
- Interest paid in t: 20 m.u.
- Debts payments in t :100 m.u.
- Total Revenues(Receipts) excluding debt emission in t: 80 m.u.
- Debt emission in t: 120 m.u.
- Stock of Debt at the beginning of t : 500 m.u.

5.10. a) Calculate the conventional public budget balance for t.

5.10. b) Calculate the primary public budget balance for t.

5.10. c) Calculate the variation in the stock of public debt between the beginning and the end of t.

5.10. d) Given the data provided would it make sense to emit public debt of more than 120 m.u.? Use the public budget restriction in your answer.

5.10. e) Calculate the implicit interest rate on public debt for t.

Public Expenditure in Portugal (10^6 current Euros):
2007 and 2011

	2007	2011
Social benefits	31 311	37 624
Staff expenditure (civil servants)	20 473	19 426
Interest	5 084	6 911
Intermediate consumption	7 380	8 019
Subsidies	1 349	1 199
Other current expenditure	3 915	4 410
Gross fixed capital formation	4 509	4 403
Other capital expenditure	1 091	2 431
Total	75 112	84 423

Sources: Statistics Portugal (2012a, 2012b)

Public Revenue in Portugal (10^6 current Euros):
2007 and 2011

	2007	2011
VAT (Value Added Tax)	14 064	13 935
ISP (Tax on Petroleum Products)	3 325	3 002
Other indirect taxes	7 138	6 453
IRS (Income Tax)	9 280	10 511
IRC (Corporation Tax)	5 760	5 270
Other direct taxes	1 054	1 182
Social security contributions	19 648	20 927
Other current revenue	8 087	7 995
Capital revenue	1 318	7 641
TOTAL	69 674	76 916

SOURCES: Statistics Portugal (2012a, 2012b)

Consider the tables above and decide whether the following statements are true or false. Correct the errors of the false statements.

a) Capital expenditure makes up the main share of public expenditure.

b) Civil servant remuneration accounts for the largest share of total public expenditure.

c) The practice of outsourcing (contracting external services instead of using civil servants) tends to raise the relative share of intermediate consumption and lower the cost of personnel.

d) Current revenues make up the main share of public revenue.

e) Taxes are considered a current revenue, and most revenue from taxes comes from direct taxes.

f) The tax on the consumption of alcoholic beverages is included in "Other indirect taxes".

g) In the year 2011, the relative importance of indirect taxes in public revenue increased compared to year 2007.