## 2. Measuring Economic Activity and Economic Variables

***Problem 2.1.***

The table presented below shows some data for an open economy (without State).

Data refer to a particular year:

(Units: m.u.=monetary units).

| | Production | Imports | Sales on Domestic Market | Sales on External Markets |
|---|---|---|---|---|
| Intermediate Consumption Goods | 200 | 150 | 250 | 100 |
| Final Goods | 500 | 300 | 700 | 200 |
| Capital Goods | 300 | 200 | 300 | 150 |

Compute:

a) The inventory investment and ACOV.

b) The total of Resources and Uses of this economy.

c) The Gross Added Value using two methodologies (approaches): by the production approach and by the expenditures approach.

*Problem 2.2.*

In National Accounts, what is the difference between:

a) A firm buying a car for an executive or a firm giving the executive the extra income necessary to buy the car.

b) Hiring someone to do the housework or doing it yourselves in family.

c) Buying a household appliance manufactured in Portugal or buying one imported from Japan.

*Problem 2.3.*

The values of some Portuguese economic variables were

(year 2006; EUR 109)

| | |
|---|---|
| Gross Value Added (base prices) | 133,055 |
| Labor Income | 77,773 |
| Intermediate Consumption | 154,854 |
| Gross Fixed Capital Formation | 33,758 |
| Net Indirect Taxes (Total) | 21,419 |
| Net Indirect Taxes on Products | 22,391 |
| Net exports of goods and services | -12,767 |
| Final Consumption | 133,732 |
| Inventory Investment and ACOV | 723 |
| Imports of goods and services | 60,971 |
| Fixed Capital Consumption | 25,718 |
| Net Primary Income from External Sector (Abroad)[1] | -5,863 |
| Net Indirect Taxes paid to the rest of the world (External Sector)[2] | -298 |
| Net Current Transfers | 2,088 |
| Net Capital Transfers | 1,856 |

Source: INE (2012a)

[1] Primary incomes received from the rest of the world, net from primary income sent to the rest of the world

[2] Indirect taxes paid by domestic producers and sent to the rest of the world (e.g. European Union institutions) net of subsidies received from the rest of the world (e.g. European Union institutions) by domestic producers.

a) Compute: Investment (or Gross Fixed Capital Formation), Exports, Net Indirect Taxes on Production, Production, and Gross Profits (=Gross operating surplus, EE) plus Mixed Income (=RM).

b) Check the basic identities of National Accounts.

c) Compute the Net Domestic Product at market prices.

d) Compute Gross National Product at market prices (or Gross National Income). Analyze the possibility of Gross Domestic Product of a country being less than its Gross National Product (for one specific year).

e) Compute Gross Disposable Income and Net Disposable Income.

f) Compute Gross Saving.

g) Verify the need (or the capability) to finance the Portuguese economy in the period under study.