

Midterm Exam I

1. (15 Points) Calculate the GDP of **KingLand**, a fictitious economy whose numbers are listed below. Do so using all three methods (value added approach, income approach, and expenditure approach). Please do indicate your calculations clearly.

KingLand, year 2012

Farmer King, (private firm)

Corn Sold to Govt	\$30
Corn Sold to Singapore	\$25
Corn Sold to KingFoodCo, Inc	\$20
Payment to workers	\$40
Tax on profit	\$25
Pesticides imported for Corn Production	\$5

Govt

Total Tax Income	\$65
Payment to workers	\$15
Purchase of Corn	\$30
Purchase of Corn Flakes	\$20
Unemployment benefits Paid	\$5

KingFoodCo, Inc

Corn Flakes Sold to Consumers	\$100
Corn Flakes Sold to Govt	\$20
Corn bought from Farmer King	\$20
Salt bought from Egypt for Corn Flakes	\$10
Payment to workers	\$20
Tax on Profit	\$30
<u>Corn Inventory</u>	
Beginning of Year	\$10
End of Year	\$5

Households

Taxes on wage income	\$10
Unemployment benefits Received	\$5
Corn Flakes purchased	\$100

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2. (15 Points) Suppose that the following equations describe a simple Keynesian economy: $C = 18 + 0.9(Y - T)$; $T = 20 + (0.1)Y$; $I = 2500 + (0.09)Y$; $AE = 2700 + (0.95)Y$. Given that $AE = C + I + G$, find

- (I) the multiplier
- (II) equilibrium GDP
- (III) Equilibrium G

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3. (25 Points) Turkish government has been experiencing fiscal surplus for years. Suggest a policy mix in the IS-LM setup to achieve a **decrease** in fiscal surplus while **keeping GDP level Y constant**. **Discuss** in detail possible macroeconomic implications of this policy mix on aggregate expenditure and its components? **Do not forget to support your answer by a figure.**

4. (30 Points) Consider the following IS-LM model:

$$C = 400 + 0.75YD; T = 400 + 0.1 \cdot Y; I = 300 - 1500i; G = 600; P = 0.5$$

$M^d = 3 \cdot Y - 12000 \cdot i$ (real money demand); $M^s = 3000$ (nominal money supply). If

you solve this model, you find that **IS** equation is $i = \frac{1000}{1500} - \frac{0.325}{1500}Y$ and

$i = \frac{3}{12000}Y - \frac{6000}{12000}$ is **LM** equation. And equilibrium values are $Y^* = 2500$ and

$i^* = 0.125$ (=12.5%).

- Suppose now that government spending is increased by 100 (from 600 to 700). What is the **government spending multiplier**? **Calculate**.
- Go back to original question. Suppose now that there is a policy mix and that government spending is increased by 100 (from 600 to 700) and **Nominal MS** from **3000** to **3500**. What is the **mixed policy multiplier**? **Calculate**.

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5. (15 Points) Suppose that medium of exchange/ unit of currency/ store of value in **GoldLand** is **GOLD**. Suppose that rich gold resources are found in the country and all these resources are distributed to the nation equally and freely. What would happen in the economy? Analyze in an IS-LM setup (recall that price level is fixed in IS-LM)? **Do not forget to support your answer by a figure.**