

# Introduction to International Economics, Paolo Paesani

## MOCK EXAM 30/09/2024

### Question 1. Keynesian open economy model

Answer the questions below, based on the following data

1.  $Y = C + I + G + X - M$
  2.  $C = 80 + 0.75(Y - T)$
  3.  $I = 600 - 1000r$ ;  $r = 0.15$
  4.  $G = 200$
  5.  $T = 100 + 0.25Y$
  6.  $X = 300 + 0.002Y_w + 100e$ ;  $Y_w = 20.000$ ,  $e = 1$
  7.  $M = 100 + 0.2Y - 150e$ ;  $e = 1$ ,
- a. Calculate the equilibrium values of GDP, private consumption, private savings, government budget balance and of net exports.
  - b. How do these values change if the domestic currency depreciates by 20% ( $e$  rises from 1 to 1.2)? Calculate the new equilibrium values and explain what happens to GDP, net exports and the government budget balance, using the concept of the open economy multiplier.
  - c. How do these values change if the world GDP falls to 18.000? Calculate the new equilibrium values and explain what happens to GDP, net exports and the government budget balance, using the concept of the open economy multiplier.
  - d. What can the government do to mitigate the impact of the fall in world GDP on domestic GDP? What are the consequences of these measures?

### Question 2. Foreign exchange rates

1. Comment on the graph below, which shows the Euro - Indian Rupee exchange rate over the last 5 years.
2. How would you explain the movement of the rupee against the euro between 2021 and 2023 using the Forex Market Graph? (complement with creative explanation)
3. Based on your answer to the previous question, how do you think the observed change in the exchange rate between the euro and the rupee has affected international trade between the Euro area and India, all else being equal?

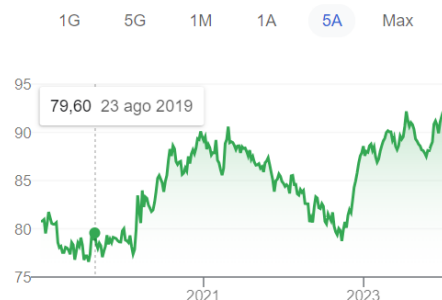
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### Question 3. Balance of payments (Max 10 points)

	First quarter 2022	Second quarter 2022	Third quarter 2022	Fourth quarter 2022	First quarter 2023	2021	2022
	millions of dollars	millions of dollars	millions of dollars	millions of dollars	millions of dollars	millions of dollars	millions of dollars
<b>Capital account and current account</b>							
<b>Net lending / net borrowing, from capital account and current account</b>	<b>6,214</b>	<b>3,007</b>	<b>-14,595</b>	<b>-3,784</b>	<b>-4,777</b>	<b>-6,787</b>	<b>-9,158</b>
Current account balances	6,267	3,007	-14,595	-3,784	-4,720	-6,749	-9,105
Goods and services	8,742	4,627	-8,302	-927	-195	-1,041	4,140
Goods	11,845	10,846	-2,766	1,959	5,834	4,695	21,885
Services	-3,103	-6,219	-5,536	-2,886	-6,029	-5,736	-17,744
Primary income	-182	-1,690	-5,642	-1,985	-2,147	-298	-9,498
Compensation of employees	-1,400	-1,425	-1,456	-1,483	-1,513	-5,323	-5,764
Investment income	1,218	-265	-4,186	-502	-633	5,025	-3,735
Direct investment	9,706	9,057	5,122	9,575	9,549	32,465	33,461
Portfolio investment	-5,779	-7,020	-9,120	-9,419	-10,184	-20,572	-31,338
Other investment	-2,709	-2,302	-188	-658	1	-6,868	-5,857
Secondary income	-2,293	69	-651	-873	-2,379	-5,410	-3,747
Capital account balance	-53	0	0	0	-57	-38	-53
<b>Financial account</b>	<b>1</b>	<b>2</b>					
<b>Net lending / net borrowing, from financial account</b>	<b>1,819</b>	<b>3,721</b>	<b>-7,943</b>	<b>-5,171</b>	<b>-12,428</b>	<b>-2,315</b>	<b>-7,574</b>
<b>Discrepancy (net errors and omissions)</b>	<b>-4,395</b>	<b>715</b>	<b>6,652</b>	<b>-1,386</b>	<b>-7,651</b>	<b>4,472</b>	<b>1,585</b>

<https://www150.statcan.gc.ca/n1/daily-quotidien/230530/t001a-eng.htm>

1. Briefly comment the table above, focusing on the current account and its component.
2. What is primary income? What does a negative value of the net primary income indicate?
3. Complete the following sentence, which refers to the Table above "In 2022, Canada was a net a) .... with respect to the rest of the world, as indicated by the b) ... values in the c) ... and d) ... This implies that Canada's NIIP, defined as the difference between d) .... and e) .... , f) ....
4. Define net errors and omissions (NEO), show how NEO is calculated and briefly discuss what a negative NEO indicates.

### BONUS QUESTION (Max 2 points)

What is the effect of a restrictive monetary policy by the US Federal Bank on the euro-dollar exchange rate and why?