

Introduction to Macroeconomics · Final exam · 1 June 2018

DNI Number _____ Surnames _____ Name _____

WRITE YOUR ANSWERS TO QUESTIONS 1 TO 25 IN THE TABLE BELOW

Questions 1 to 25 [25%]: correct answer, +1%; incorrect answer, -1%; no answer, -0.5%.

Write 'T' if you consider the sentence true and write 'F' if you consider the sentence false																									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	

1. If real GDP increases and the GDP deflator decreases, then nominal GDP necessarily rises.
2. The real interest rate is the difference between the CPI inflation rate and the GDP deflator inflation rate.
3. A continuous and sustained decrease in the exchange rate is called disinflation and, sometimes, deflation.
4. A rise in the government surplus is not necessarily accompanied by a fall in net exports.
5. The Fisher equation does not establish a connection between the real interest rate, the inflation rate and the unemployment rate.
6. The quantity equation states that the amount of money in an economy is the money multiplier multiplied by the monetary base.
7. Every financial asset is a form of money created by the central bank.
8. The euro does not depreciate against the dollar when the exchange rate goes from 155 €/€ to 1.55 \$/€.
9. In the liquidity market model an expansionary open market operation (since it consists of a purchase of financial assets) is represented by a left-ward shift of the demand function.
10. In the aggregate supply and demand model, a supply-side policy and a contractionary fiscal policy have in common that both tend to lower the inflation rate.
11. The euro is overvalued with respect to its purchasing power parity value against the dollar if the exchange rate is 155 \$/€ and the parity exchange rate is 155 €/€.
12. It is called revaluation the intervention by the central bank in the currency market consisting of buying the domestic currency and selling the foreign currency.
13. Okun's law and the Phillips curve have in common that both are macroeconomic relationships that make no reference to the inflation rate.

14. Supply-side policies are a kind of macroeconomic policy that can only be executed by central banks.
15. A rise in the real exchange rate lowers net export and, therefore, reduces aggregate demand.
16. The amount of euros that Americans demand would tend to increase if the European inflation rate diminishes.
17. According to the Fisher effect, a contractionary monetary policy crowds out private consumption and private investment.
18. It is not typical of the contractionary phase of the business cycle a reduction in the unemployment rate.
19. In the shortest run, an expansionary fiscal policy tends to rise the government deficit.
20. The most immediate effect of a contractionary open market operation is to shift to the left the supply of euros function in the currency market, since in this type of operation the central bank sells euros in exchange for dollars.
21. The money creation process is a series of events in which deposits are created, which in turn are used to make loans, which eventually lead to the creation of more deposits.
22. According to Goodhart's law, the sum of M1 and the dollar purchasing power is equal to the real interest rate real appreciation minus the aggregate supply function; on the other hand, if there is stagflation, the law states that a fixed exchange rate minus a devaluation of the real exchange rate is necessarily larger than an increase in nominal GDP minus a decrease in the CPI.
23. In the liquidity market model, if households sell financial assets massively, a rise is the most immediate likely effect on the interest rate.
24. The currency market model and the aggregate supply and demand model have in common that both models can be used to ascertain effects of a reduction in exports; specifically, the first model the effect on the exchange rate and the second one, the effect on the macroeconomic equilibrium.
25. The real interest rate constitutes the best measure of the level of competitiveness of an economy.

<p>26. [2%] Why the real interest rate is not always equal to the nominal interest rate?</p>	
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27. [3%] Mark () the box on the left of each monetary policy instrument, fill () the box on the left of each fiscal policy instrument and indicate () those that are, at the same time, fiscal and monetary policy instruments. An incorrect choice cancels out a correct choice.

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|--------------------------------------------|------------------------------------------------------|---------------------------------------------|-------------------------------------------|---------------------------------------------|
| <input type="checkbox"/> Real GDP | <input type="checkbox"/> PPP exchange rate | <input type="checkbox"/> Bank loans | <input type="checkbox"/> Money multiplier | <input type="checkbox"/> Liquidity ratio |
| <input type="checkbox"/> M2 | <input type="checkbox"/> GDP deflator | <input type="checkbox"/> Aggregate supply | <input type="checkbox"/> Discount factor | <input type="checkbox"/> Real exchange rate |
| <input type="checkbox"/> Nominal GDP | <input type="checkbox"/> Open market operation | <input type="checkbox"/> Phillips curve | <input type="checkbox"/> Fisher equation | <input type="checkbox"/> Estagflation |
| <input type="checkbox"/> Deposits | <input type="checkbox"/> Government expenditure | <input type="checkbox"/> Transfers | <input type="checkbox"/> Tax rate | <input type="checkbox"/> Foreign GDP |
| <input type="checkbox"/> CPI | <input type="checkbox"/> Legal (or minimum) reserves | <input type="checkbox"/> Demand for dollars | <input type="checkbox"/> Net exports | <input type="checkbox"/> Public investment |
| <input type="checkbox"/> Unemployment rate | <input type="checkbox"/> Return of a financial asset | <input type="checkbox"/> Deflation | <input type="checkbox"/> Okun's law | <input type="checkbox"/> Private investment |

28. [8%] Reserves are 155, the liquidity ratio is 1/2, M1 is 930 and nominal GDP is 1860. If possible, find the money stock (the amount of money), the monetary base, the reserve ratio, cash in the hands of the public, deposits, the money multiplier and the velocity of circulation of money. If some value cannot be found, explain why.

29. [4%] The purchasing power parity exchange rate is 1/155 €/\$. (i) Calculate the real exchange rate if the nominal exchange rate nominal is 1550 \$/€ (if it cannot be calculated, explain why and add sufficient information to find it). (ii) State the units. (iii) Explain the meaning of the result.

30. [4%] Calculate the nominal interest rate if the real interest rate is 155%, current CPI is 1550 and the CPI from the previous period is 3100. If it cannot be calculated, explain why and add the information needed to calculate it.

31. [1.5%] Explain your answer to question 8.

32. [1.5%] Explain your answer to question 14.

33. [1.5%] Explain your answer to question 15.

34. [1.5%] Explain your answer to question 16.

35. [5%] In a recent visit to London, Turkey's president, Recep Tayyip Erdoğan, expounded during a lunch with fund managers, and in an interview with Bloomberg, what is regarded as an eccentric view (in the sense that it contradicts mainstream economic theory): that high interest rates (higher borrowing costs) cause high inflation. Erdoğan contends that 'interest rates are the mother and father of all evil'. What makes Erdoğan's view eccentric? That is, what is the contradiction between this view and orthodox economic theory? (Turkey's inflation rate: 10.9%; official interest rate: 16.5%.) <https://www.ft.com/content/a9b3dc8a-5a6a-11e8-bdb7-f6677d2e1ce8>

36. [12%] Read first question 35. Erdoğan is the favourite to win the presidential and parliamentary polls to be held on the next 24th of June. In the Bloomberg interview Erdoğan declared that he will assume more responsibility for conducting monetary policy in case of winning the elections; that would compromise central bank independence. Immediately after the publication of these declarations the Turkish lira lost almost a one percent value with respect to the dollar (so far in 2018 the lira has dropped 14% against the dollar).

(i) Using a graphical representation of the currency market model, where liras exchange for dollars, explain how and why Erdoğan's claims, supporting an interest rate cut in the presence of a high and rising inflation rate, could make the lira depreciate versus the dollar.

(ii) On the last Saturday 26, Erdoğan made a call on Turkish citizens to convert their dollars and euros to liras: 'Together we will foil this plot,' he said. Explain if this conversion would make the lira appreciate or depreciate against the dollar.

<https://www.ft.com/content/12b806c0-6268-11e8-a39d-4df188287fff> [to foil = to make something come to nothing, to thwart]

37. [8%] Read questions 35 and 36 first. Turkey has been the fastest-growing economy in 2017: 7.4% GDP growth. The belief is held that a booming economy will improve the chances of Erdoğan and his party (Justice and Development party, AKP) to win the elections.

With the help of ideas and/or models developed in the course, explain why GDP growth may make more likely that a ruling party wins an election.

38. [8%] Read questions 35 and 36 first.

(i) Turkey runs a current account deficit (a foreign deficit) close to 5% of GDP. Why the continuation of Turkey's deficit depends on maintaining capital inflows (that is, foreign borrowing provided by foreign investors)?

(ii) Explain how the flows of capital entering Turkey would be affected by the fact that foreign investors lose their confidence on Turkey's macroeconomic policy-makers.

39. [8%] Debt is one of the greatest threats Turkey faces. Two of Turkey's largest companies are trying to re-organize \$12 billion in bank loans. Foreign debt of Turkish firms amounts to \$295 billion. International investors keep an eye on Turkish banks, as they seek to know the quality of loans given and whether loans are being repaid. In the stock market, the value of shares of Turkish banks continue to drop: their value is at a 9-year low. Despite all that, the government, corporations and banks refuse to admit that there is a problem.

<https://learningenglish.voanews.com/a/turkey-economic-policies-cause-money-to-drop-value/4344103.html>

Explain, and analyze by means of a graphical representation of the liquidity market model, the effect on Turkey's interest rate of a massive selling by foreign investors of Turkish financial assets (such as debt issued by Turkey's government and shares of Turkish companies).

40. [12%] Read question 39 first. Explain the effect on the Turkish macroeconomic equilibrium of each of the following events and illustrate your explanation graphically by means of the aggregate supply and demand model.

(i) The volume of loans offered by the Turkish banks decreases.

(ii) Taxes on property and on durable consumption goods are both lowered (these measures were applied in Turkey in 2017).