

DNI Number _____ 1st Surname _____ Name _____

1. [4%] Indicate something that **M0** and **M1** have in common and something that differentiates them.

2. [5%] Explain if there is any relationship between central bank money (reserves, specifically) and bank money.

3. [4%] What is a contractionary open market operation?

4. [4%] Indicate something that an open market operation and the lending facility have in common and something that differentiates them.

5. [5%] Why is a central bank unable to control at the same time the interest rate and **M1**?

6. [10%] Explain how the money multiplier process would be affected by assuming that consumers only take a fraction (50%, for instance) of all the loans banks offer (the money multiplier model presumes that the rate of acceptance is 100%).

7. [5%] Explain whether the euro appreciates or depreciates against the dollar if the exchange rate goes from 4 €/ \$ to 4 \$/€.

8. [10%] Explain how the money multiplier process would be affected by a reduction in the number of banks.

9. [4%] How are the concepts of financial asset and interest rate related?

10. [18%] Explain, and analyze graphically by means of the liquidity market model, the effect on the equilibrium interest rate of a rise in the VAT (a tax that consumers pay when they buy goods). Identify a monetary policy decision by the central bank that could neutralize that effect on the interest rate.

11. [10%] If possible, calculate the reserve ratio and cash in the hands of the public if the money multiplier is 4 and the sum of cash in the hands of the public and deposits is four times reserves.

12. [5%] With exchange rate 4 \$/€, find the rate (in €/€) that obtains when the dollar depreciates against the euro by 50%.

13. [17%] Explain, and analyze graphically by means of the currency market model, the effect on the equilibrium exchange rate of establishing a tax on the purchases made by foreigners. What if the foreign economy creates an analogous tax?

14. [416%] Explain, and analyze graphically by means of the currency market model, the effect on the equilibrium exchange rate of a fall in the foreign inflation rate. Explain and analyze graphically whether it is a rise or a fall in the foreign interest rate that could revert the exchange rate to its initial value.

15. [5%] By how much has approximately varied the nominal exchange rate if the real exchange rate has fallen a 1%, the home price level has gone down by 2% and the foreign price level has increased by 3%? Justify the answer.

16. [5%] Calculate (indicating the corresponding formula) the real exchange rate if the nominal exchange rate is 1 and the home price index triples the foreign price index.

17. [5%] Calculate the foreign price index and the nominal exchange rate if the purchasing power parity exchange rate is 2 and the real exchange rate is also 2.

18. [5%] Calculate the purchasing power parity exchange rate if the nominal exchange rate is 4 and this rate is a 100% overvalued with respect to its parity value.

19. [4%] What does the open economy trilemma assert?

20. [5%] Explain if the home economy becomes more or less competitive when, being constant the domestic prices, the foreign prices go up and the home currency appreciates.

21. [5%] Real GDP is larger than nominal GDP in period t . Explain if the GDP deflator has increased or decreased between the base period and period t .

22. [12%] Analyze graphically in the currency market model what intervention by the central bank should be carried out to support a fixed exchange rate which is below the market exchange rate.

23. [5%] The GDP deflator (in base 100) is 200 in period 1 and 190 in period 2. Find by how much real GDP has approximately changed if nominal GDP has fallen by 3%.

24. [7%] Explain if a rise in the domestic interest rate stimulates business growth and business activity.

25. [5%] Explain if a rise in the domestic interest rate may make the home currency appreciate.

26. [8%] The 2016 Forbes List of The World's Most Powerful People ranks, as number 6, the Chair of the US Federal Reserve (at the time, Janet Yellen) and, as number 11, the president of the European Central Bank (then and now, Mario Draghi). Why are central bankers considered so powerful?
<https://www.forbes.com/powerful-people/list/#tab:overall>

27. [16%] Imagine that the Catalan Comitees for the Defense of the Republic call a 6-month strike and whose follow up is expected to be considerable. Use the AS-AD model (justifying the shifts in the AS or AD functions) to ascertain the effect of the call (supposed to be successful) on the Spanish macroeconomic equilibrium.

28. [7%] Explain how an appreciation of the dollar against the euro would affect the profitability of industrial US companies having factories (and doing business) in the eurozone.

29. [4%] Indicate something that the concepts of deflation and disinflation have in common and something differentiating them.

30. [7%] Explain the following claim: "A floating currency is as helpful as a watch or clock that can't keep proper time. It harms long-term investing, the crucial key to a higher standard of living." <https://www.forbes.com/sites/steveforbes/2018/04/02/the-new-head-of-the-federal-reserve-unfortunately-is-a-disappointment/#5c3e1053213e>



31. [20%] On 21 March, the US Federal Reserve increased the interest rate, from 1.50% to 1.75%, the first rise under the new chairman, Jerome H. Powell (photo by Kevin Dietsch/UPI). “The Fed’s decision to raise rates by 25 basis points reflects a strengthening economy, reflected in extremely low unemployment rates and a growing gross domestic product that’s being stimulated by tax cuts and a budget deal that will raise federal spending by \$300 billion

over the next two years.” <https://money.usnews.com/investing/stock-market-news/articles/2018-03-22/fed-interest-rate-hike>.

Use the AS-AD model (justifying any shift in the AS or AD functions) to ascertain the effect on the macroeconomic equilibrium of a tax cut and an increase in government spending. Would a rise in the interest rate contribute to offset the effect of these two measures on the inflation rate?

33. [18%] “At the heart of all of Italy’s problems is ingrained corruption, nepotism, and discrimination against women that undermine meritocracy. The best and the brightest who lack connections or have the bad luck of being born female leave for countries such as Germany and the US where they are compensated for their talents. If the best jobs are obtained based on who you know and your gender, the business sector will be led by persons who lack talent and who are unable to exploit innovations that can maximize productivity. Low productivity, in turn, leads to economic stagnation, lower tax revenue, higher debt and economic crises that force the European Union to intervene.” <http://www.jpost.com/Opinion/Italys-malaise-544378>

Use the AS-AD model (justifying any shift in the AS or AD functions) to ascertain the effect on the macroeconomic equilibrium of removing from the administration of firms competent, talented and innovative people. Explain why low productivity leads to economic stagnation (GDP does not grow).

32. [9%]. Explain whether you agree or disagree with the view expressed in the following tweet.



When a country (USA) is losing many billions of dollars on trade with virtually every country it does business with, trade wars are good, and easy to win. Example, when we are down \$100 billion with a certain country and they get cute, don’t trade anymore-we win big. It’s easy!

12:50 PM - Mar 2, 2018

34. [15%] “Italy’s productivity crisis needs to be tackled by reforming the civil service, incentivising investment in human capital both in schools and in the workplace, and attracting foreign investors.” <http://theconversation.com/italys-new-government-has-a-huge-economic-challenge-ahead-92943>

Use the AS-AD model (justifying any shift in the AS or AD functions) to ascertain the effect on the macroeconomic equilibrium of improving public services, professional training and education, and of attracting foreign business investors.

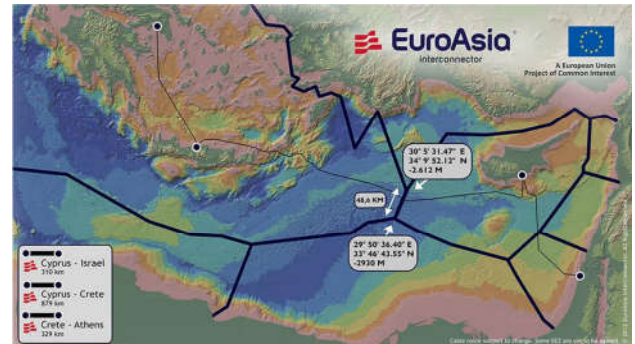
35. [14%] “A key driver of Poland’s economic development is consumption, which makes up about 60% of GDP. To boost consumption (and reverse demographic trends), in April 2016 the country’s government introduced the ‘Family 500 plus’ social benefit programme, giving families an extra 500 zloty (about \$150) for every second and further child. The programme cost the state an estimated 0.9% of GDP in 2016, and 1.2% of GDP in both 2017 and 2018. But investment, especially from EU funds, is also crucial. Poland will receive some €105.8bn in EU funding from the 2014-2020 programme. However, the support the country will receive in the next EU budget is widely expected to be lower – in part due to the UK vote for Brexit but also due to Poland’s economic success.” <http://www.thebanker.com/World/Will-EU-dispute-derail-Poland-s-economy?ct=true>

Show in the AS-AD model the effect on the GDP of the benefit programme and the reduction in EU funding.

36. [17%] “Cyprus’s economic growth has continued to accelerate, but private sector indebtedness and nonperforming loans are still at very high levels, the International Monetary Fund said (...) Cyprus was pulled back from bankruptcy in a 10-billion-euro assistance package by the Eurogroup and the IMF in 2013, after consecutive quarters in the red.” <http://www.ekathimerini.com/227313/article/ekathimerini/business/imf-cypruss-npls-still-high-despite-accelerated-economic-growth>

How are the macroeconomic equilibrium and the interest rate affected by a rise in the proportion of nonperforming loans (loans that are in default or close to being in default)?

37. [15%] “EuroAsia Inter-connector is a leading European Union Project of Common Interest, also labelled as an “electricity highway” by the European Commission, connecting the national grids of Israel, Cyprus and Crete-Attica in Greece and creating a reliable energy bridge between the continents of Asia and Europe allowing bi-directional transmission of electricity. The EuroAsia Inter-connector will provide to the partner countries significant socio-economic benefits worth 10 billion euros which will derive from the decrease of electricity cost by using more efficient methods in power generation (...) and from the reduced cost of replacing old power plants which will be avoided.” <http://www.balkaneu.com/greece-cyprus-israel-diplomacy-of-high-voltage/>



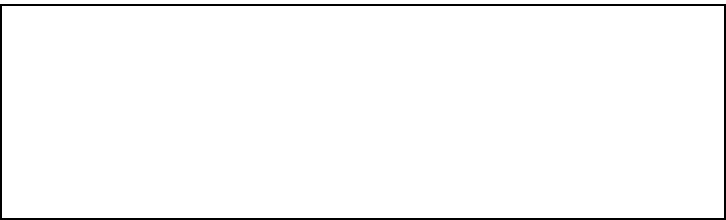
Show in the AS-AD model the effect on the GDP and the inflation rate of a infrastructure that lowers the electricity cost.

38. [10%] “Card transactions grew some 40 percent in the first quarter of the year compared to the same period in 2017 (...) Greek consumers are using plastic money more and more frequently, even for small transactions.” <http://www.tornosnews.gr/en/greek-news/economy/30817-travel-tech-cashless-transactions-continue-to-gain-ground-across-greece.html>

Explain how using plastic money instead of cash to make payments is likely to affect the money multiplier process.

39. [16%] “In its latest Economic Survey of Poland the Organisation for Economic Co-operation and Development encouraged policy-makers to build on the country’s economic and social progress in order to ‘tackle major remaining challenges.’ ‘To sustain rising living standards Poland has to develop its capacity to innovate and invest in skills and infrastructure, as is acknowledged in the government’s Strategy for Responsible Development,’ the report said.” <http://thenews.pl/1/12 /Artykul/354586.OECD-urges-Poland-to-build-on-economic-strength-and-innovate>

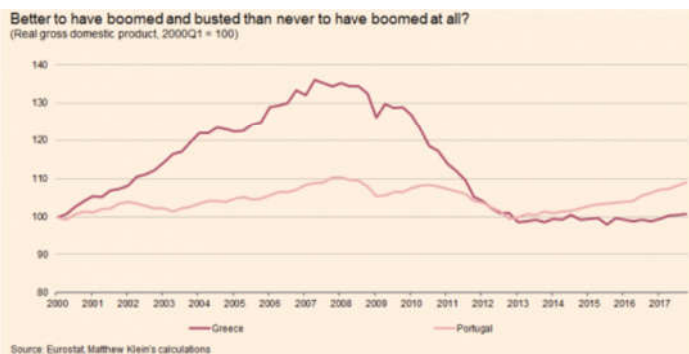
Show in the AS-AD model the effect on GDP of developing the capacity to innovate and invest in skills and infrastructure.



41. [24%] “Six out of ten unemployed Greeks aged 20 to 34 are ready to migrate or relocate to another part of Greece in order to find work, a Eurostat survey shows. However, the phenomenon is not limited to Greek youth, as 50 percent of European young people are also considering migration to solve their unemployment problem.” <http://greece.greekreporter.com/2018/03/28/most-young-unemployed-greeks-willing-to-move-for-work/>

(i) Show in the AS-AD model the effect on the macroeconomic equilibrium of two countries, A and B, of having workers from A emigrate to B. (ii) Show the effect of the same event on the interest rate of each country. (iii) Show the effect on the exchange rate.

40. [14%] The chart below shows Greece’s and Portugal’s GDP between 2000 and 2017. (i) Explain which is the most salient information that the chart conveys. (ii) If only shifts in the AD function are considered, in which periods the GDP dynamics could be explained by an AD expansion and in which ones by an AD contraction? (iii) In which country would the expansion or contraction be more intense?



<https://ftalphaville.ft.com/2018/04/04/2199417/whats-up-with-portugal/>

