Final Exam

Complete the exam promptly by 8.45 pm. Out of fairness to your classmates, please do not request extra time. Keep a steady pace; if you can't figure out a question, move on to the next.

I. Short Answers (40 points; 4 points each)

1. Describe the Feldstein-Horioka puzzle and summarize the evidence in favor of it.

2. What is the relationship between the government budget deficit and the trade deficit in theory and in practice (using the United States as an example)?

3. Summarize arguments in favor of fixed and floating exchange rate regimes.

4. The ratio of outstanding government debt to GDP is a commonly-used measure to assess the health of country's finances. Is this a good measure for this purpose? Why or why not? If you had to propose improvements in this measure, what would you propose?

5. In May 2021, more than a dozen U.S. states announced they would terminate their involvement in federal pandemic-related unemployment benefit programs. What impact is this decision likely to have on the natural rate of unemployment in these states? Provide an explanation for your answer.

6. The Taylor Rule is sometimes expressed in terms of the unemployment gap (deviation of unemployment from the natural rate):

$$i_t = i^* + a(\pi_t - \pi^*) - b(u_t - u_n)$$

   (a) Would you recommend that Japan follow this version of the Taylor Rule? Why or why not?
   (b) Would you recommend that Spain follow this version of the Taylor Rule? Why or why not?

7. How does each of the following variables affect the change in the government's debt-to-GDP ratio (holding other variables constant)?

   (a) the real interest rate; (b) the economy's growth rate; (c) the government's primary balance.

8. In July 2017, the government of Argentina issued 100-year dollar-denominated bonds at an annual interest rate of nearly 8 percent. Around the same time, 50-year euro-denominated bonds issued by the French government paid an annual interest rate of about 2 percent. What factors should influence an investor's choice between these two assets?

9. Describe how the natural rate of unemployment depends on the job separation rate and the job finding rate in an economy where the labor force is fixed. How would you determine the natural rate of unemployment in an economy where the labor force is not fixed ((that is, people can move into and out of the labor force)?

10. What is the most interesting thing you learnt in this course?

II. True or False (30 points; 2 points each)

State whether the following statements are True, False or Uncertain. For statements, that you label False, rewrite the statement in a corrected form (that is, correct the errors in the statement).

1. When savings is greater than investment the country is a net borrower because that is how an open economy makes the gap between its low investment and high savings; in contrast, for a closed economy, the country would be a net lender when savings is greater than investment.

2. The government debt-to-GDP ratio declined in the United States during the Global Financial Crisis because unconventional monetary policy was used to stabilize the economy through the actions of the Federal Reserve instead of tightening fiscal policy.

3. A country with a trade deficit borrows goods and services from other countries temporarily and pays for it with government debt.

4. In a recession, the actual unemployment rate rises above the natural rate, thereby also causing output to go above its trend and inflation to go above its target.

5. In an open economy IS/LM model, an increase in the interest rate leads to a decline increase in output and a depreciation because foreigners will only hold domestic currency if its lower value compensates them for the higher interest rate.

6. The current account deficit gives an inaccurate picture of the trade deficit because it only looks at the difference between current exports and current imports without taking into account future export prospects.

7. Economists state that the United States is not a very open economy because it does not permit diversity of thought.

8. If the real exchange rate rises, domestic goods become less expensive relative to foreign goods; hence, exports fall, imports rise and net exports rise.

9. In an open economy IS/LM model, a decrease in government spending increases output; if the central bank keeps the exchange rate unchanged, the interest rate also remains unchanged.

10. The debt ratios of many countries declined in the decades after World War II because they were all able to run large trade surpluses against one another.

11. ‘Seignorage’ is the revenue, in real terms, that the government generates by running fiscal deficits.

12. In 1987, Ireland’s deficit reduction program reduced output growth in line with the IS/LM model.

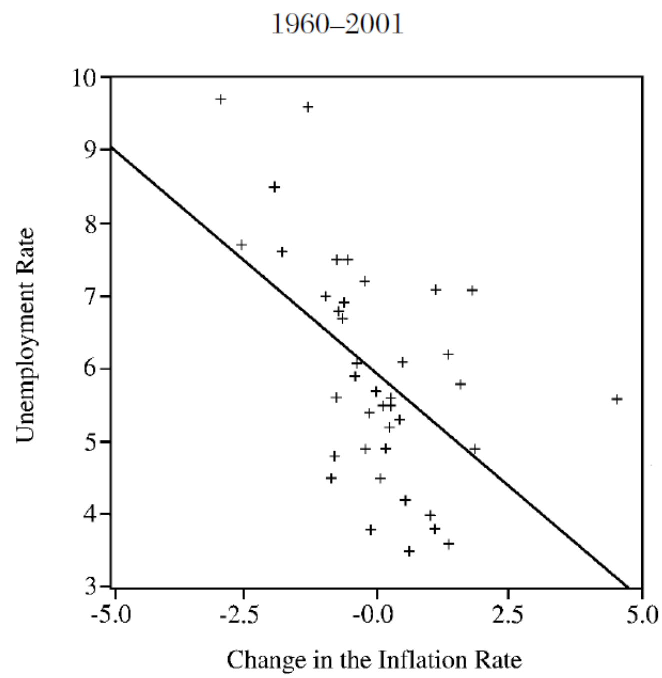
13. Okun’s Law states that when unemployment goes above the natural rate this leads to a decline in output below its trend because fewer people are producing goods.

14. An appreciation is an increase in the price of the foreign currency in terms of a domestic currency, i.e., a decline in the exchange rate.

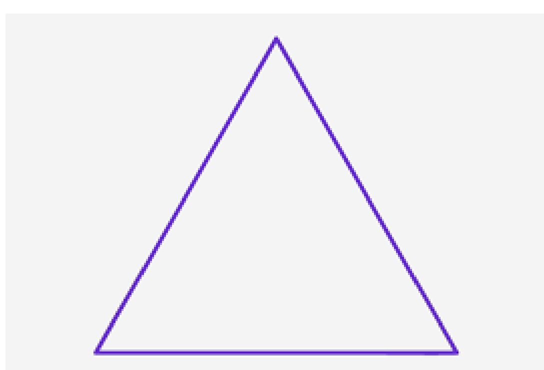
15. A ‘haircut’ is what President Xi asked President Trump to get during their summit meeting in 2018.

III. Get the Picture (30 points; 5 points each)

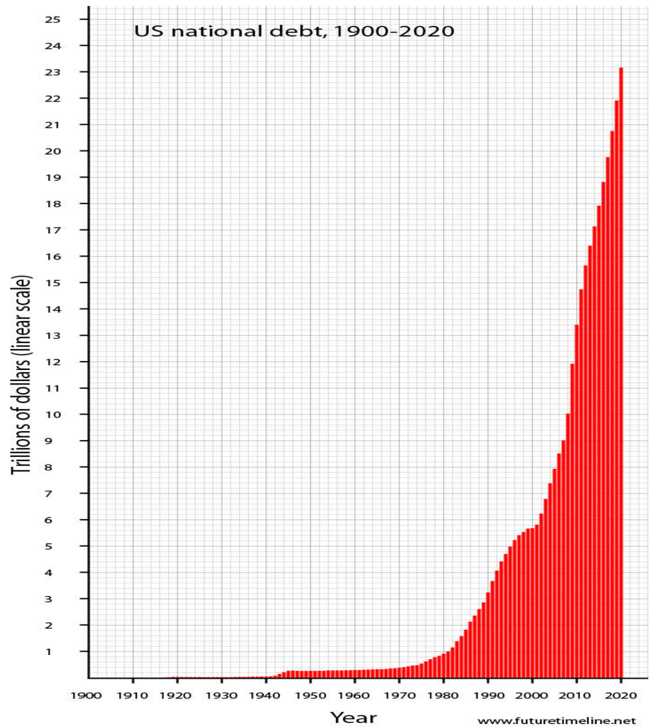
1. This picture is for the United States. What is the name of the relationship shown? How has this relationship evolved since 2001?



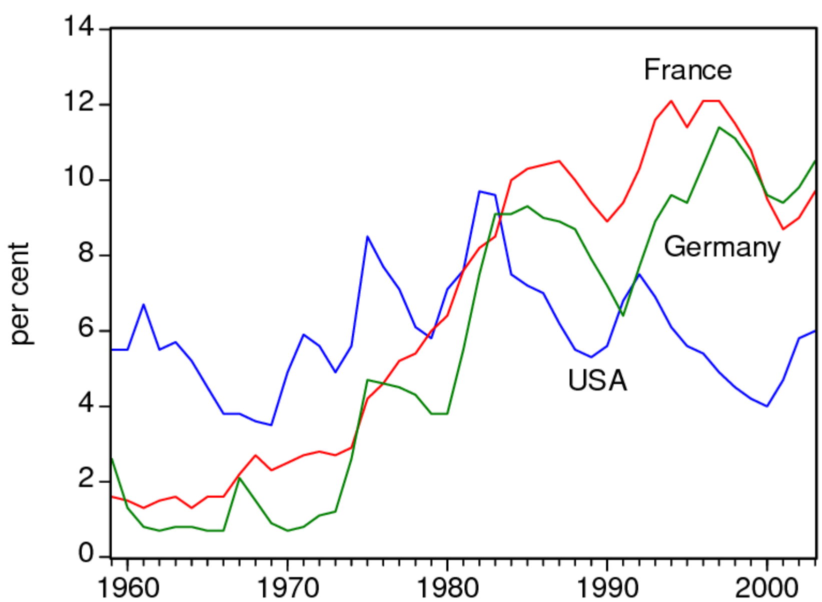
2. What is the name of the concept represented by the chart below? Explain why countries have to choose two sides of the triangle.



3. The chart below shows a steady increase in the U.S. national debt since 1900. Is this a good representation of the health of U.S. government finances? Why or why not?



4. What macroeconomic indicator is shown in the charts below? How would you explain the evolution of this indicator in the United States relative to that in France and Germany?



5. The chart below shows Greece was able to successfully reduce its current account deficit from 15 percent to GDP to essentially zero by 2015. What was the main reason for this success and would you recommend it as way of reducing the U.S. current account deficit?

6. Is this a graph of: (a) the U.S. real GDP growth rate; (b) the U.S. unemployment rate; (c) the U.S. inflation rate; (d) none of the above. Explain the reasoning for your choice. If you pick option (d), what indicator do you think this graph shows?