Problem 1. Home country pegs its currency to the USD if Home output is higher than 985, but everyone knows that Home government will allow depreciation of 1% for one year its output falls to 985 or lower. Home output is 1000 when its interest rate is 2%, but Home output falls by 5 every time the Home interest rate increases by 1 percentage point. Investors are risk neutral and there is no default risk.

(a) Suppose the peg is credible: Home government will allow depreciation of 1% for one year if output falls to 985 or lower, but no one believes it will actually come to that. For US interest rates $i^* \in \{2, 3, 4, 5, 6, 7, 8\}$, determine corresponding Home interest rates and output.

(b) Suppose the peg is non-credible: Home government will allow depreciation of 1% for one year if output falls to 985 or lower, and investors believe it will actually come to that. For US interest rates $i^* \in \{2, 3, 4, 5, 6, 7, 8\}$, determine corresponding Home interest rates and output.

(c) Whether (a) or (b) holds depends on whether investors believe that the peg is credible. Regardless of beliefs, which US interest rates will not lead to speculative attack?

(d) Regardless of beliefs, which US interest rates guarantee speculative attack?

(e) At what US interest rate are there two equilibria? What are the equilibria?

Problem 2 (Partial Sample Final Question 1). Here, have some short answer questions.

(a) What is meant by home bias in an investment portfolio?

(b) What is a currency board?

(c) As of now (2022) how many countries are in the Eurozone? Which countries are the most recent to have joined?

(d) Which two EU countries appear unlikely to join the euro?

Problem 3 (Sample Final Question 3). In the years leading up to the Great Depression, a key objective of the federal government was to balance the government budget.

(a) Suppose that tax revenue collected by the government depends on income. During a recession, what happens to government tax revenues? What does this imply about the government budget?

(b) If the government wants to keep the budget balanced, what type of fiscal policy must the government implement? Illustrate the effects of this policy using the IS-LM-FX diagram, assuming a floating exchange rate regime.

(c) State how the fiscal policy affects Y, i, E, C, I, and TB. Is this a stabilization policy?

(d) The US was part of the gold standard, fixing its exchange rate to the value of gold. Illustrate how the policy described in part (b) affects the economy differently under a fixed exchange rate regime. State how the fiscal policy affects Y, i, E, C, I, and TB.

(e) How did the macroeconomic regime affect stabilization policy in this scenario?