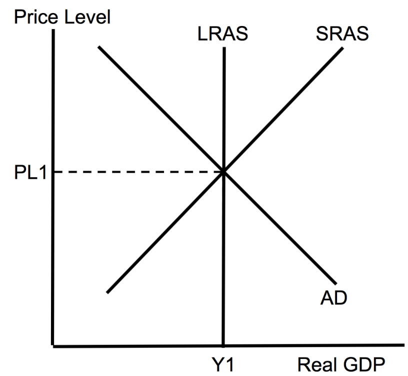
Macroeconomics Unit 3
Free Response Questions

See video in <u>Ultimate Review Packet</u> for detailed explanations.



<u>FRQ #1</u>- Assume that the United States economy currently has only frictional and structural unemployment.

(a) Draw a correctly labeled graph of the aggregate demand, short-run aggregate supply, and long-run aggregate supply and label the current equilibrium output and price levels, Y1 and PL1, respectively. See graph

(b) Assume that the government increases spending on infrastructure without raising taxes.

  (i) On your graph in part (a), show how the government action affects aggregate demand in the short run. Graph should show the aggregate demand curve shifting to the right.

  (ii) Will this government action cause employment in the short run to increase, decrease, or stay the same? Employment will increase. More government spending will increase incomes and lead to more consumer spending. This will create more jobs and increase employment (and decrease unemployment)

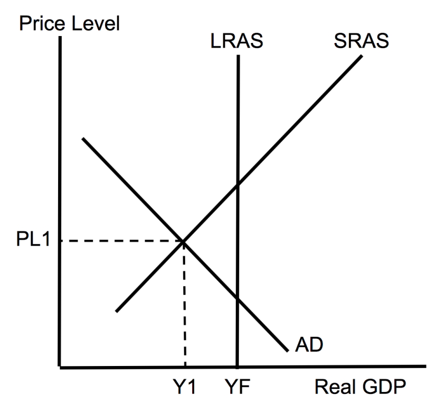
  (iii) Explain how the economy will adjust to full employment in the long run assuming there is no policy action. In the long run, nominal wages and input prices will increase, causing the SRAS curve to shift to the left until the economy returns to full employment at the natural rate of unemployment.

(c) Assume that Canada, a major trading partner for the United States, experiences a recession. Will unemployment in the United States increase, decrease, or stay the same? Explain. Unemployment in the US will increase. Canada will buy fewer US goods so US exports will decrease. This will decrease aggregate demand and the number of jobs.

(d) Assume that the central bank of the United States decreases interest rates.

  (i) In the short run, will investment increase, decrease, or stay the same. Explain. Investment will increase. Businesses will find it cheaper to borrow money and will buy more capital goods.

  (ii) In the long run, will the long-run aggregate supply increase, decrease, or stay the same. Increase.



<u>FRQ #2</u>- Country X currently has a negative output gap.

(a) Draw a correctly labeled graph of the short-run aggregate supply, aggregate demand, and long-run aggregate supply curves and show each of the following. See graph

  (i) The equilibrium price level and output, labeled PL1 and Y1, respectively.

  (ii) Full-employment output, labeled YF.

(b) Would an increase in imports by Country X return the economy to full employment? Explain. No. An increase in imports will not increase production in Country X. If people in Country X buy more foreign goods they are not adding to Country Xs GDP.

(c) Assume that the government and central bank take no policy actions.

  (i) Explain how the economy will adjust to full employment in the long run. In the long run, nominal wages and input prices will decrease, causing the SRAS curve to shift to the right until full employment at YF is reached.

  (ii) In the long run, what will happen to the natural rate of unemployment? In the long run, the natural rate of unemployment would stay the same and remain unchanged. The natural rate of unemployment is made up of frictional and structural unemployment which is not affected by changes in nominal wages or input prices.

(d) Assume instead that the government of Country X decides to use fiscal policy to achieve full employment. The marginal propensity to consume is 0.8. The equilibrium real output is $400 billion and the full-employment output is $480 billion.

  (i) Calculate the minimum change and indicate the direction of change in government spending required to to close the output gap. Increase in government spending of $16 billion.

  (ii) Calculate the minimum change and indicate the direction of change in taxes required to close the output gap. Decrease in taxes of $20 billion.

  (iii) Show the effect of the change in taxes on your graph in part (a). Graph should show the aggregate demand curve shifting to the right.

Video Help: https://youtu.be/UnLmGYLw0c0