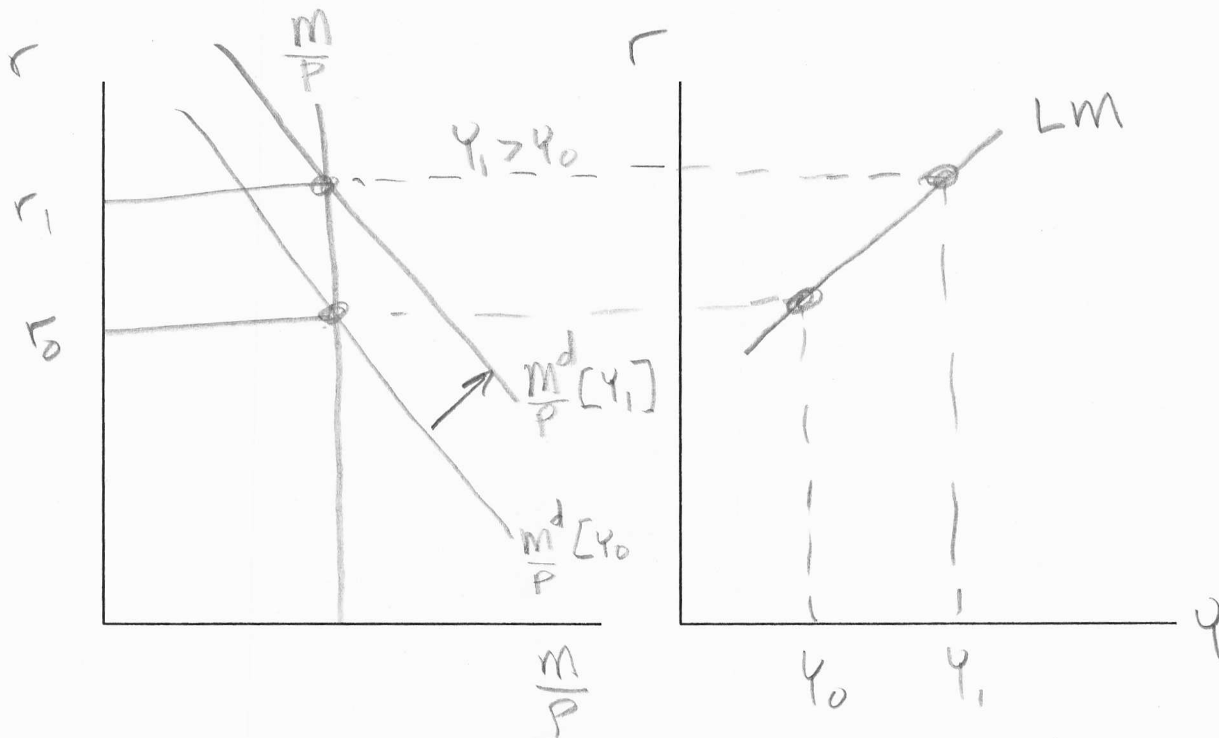
Part II Analytical Questions

Question 1 (10 points)

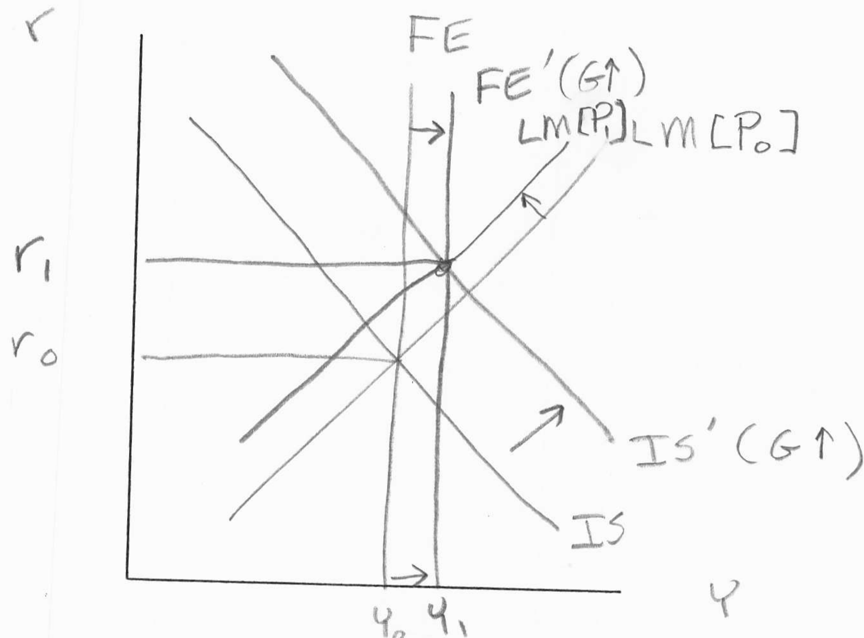
Illustrate the diagrammatic derivation of the LM Curve. In the left-hand panel below, you should plot a curve showing real money supply and real money demand curves. Be sure to label axes and curves carefully.

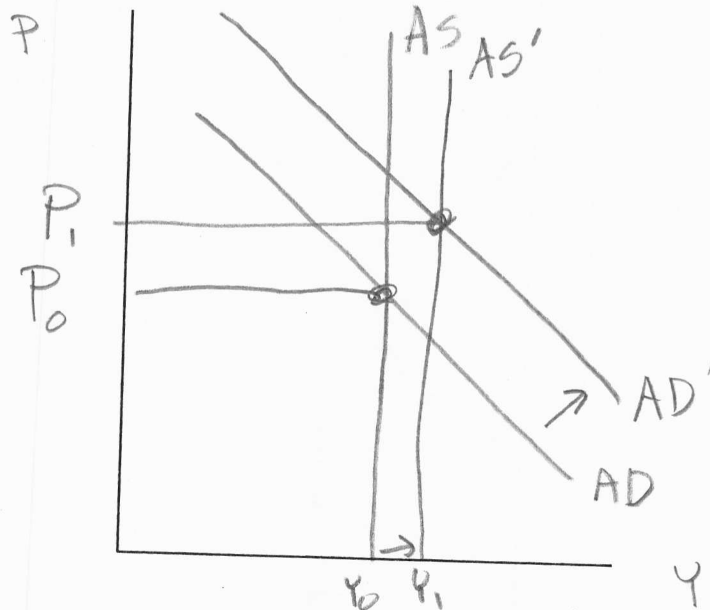
In the right-hand panel, you should plot the LM curve. Add to the diagrams as needed to explain how the LM curve is related to the money demand-money supply diagram. Again, be sure to label axes and curves correctly. Briefly explain any curve shifts that are required in your derivation.



Question 2A Classical Model (5 points)

In the space provide below, illustrate the consequences of a temporary increase in government spending (to fight a foreign war) in the **classical model**. The upper panel should plot IS, LM, and FE. The lower panel should plot AD and AS. You should initially illustrate an economy in long-run general equilibrium. You should then illustrate the consequences of the government spending shock. Be sure to label all axes and curves carefully. If a curve shifts, provide a brief explanation for the shift.





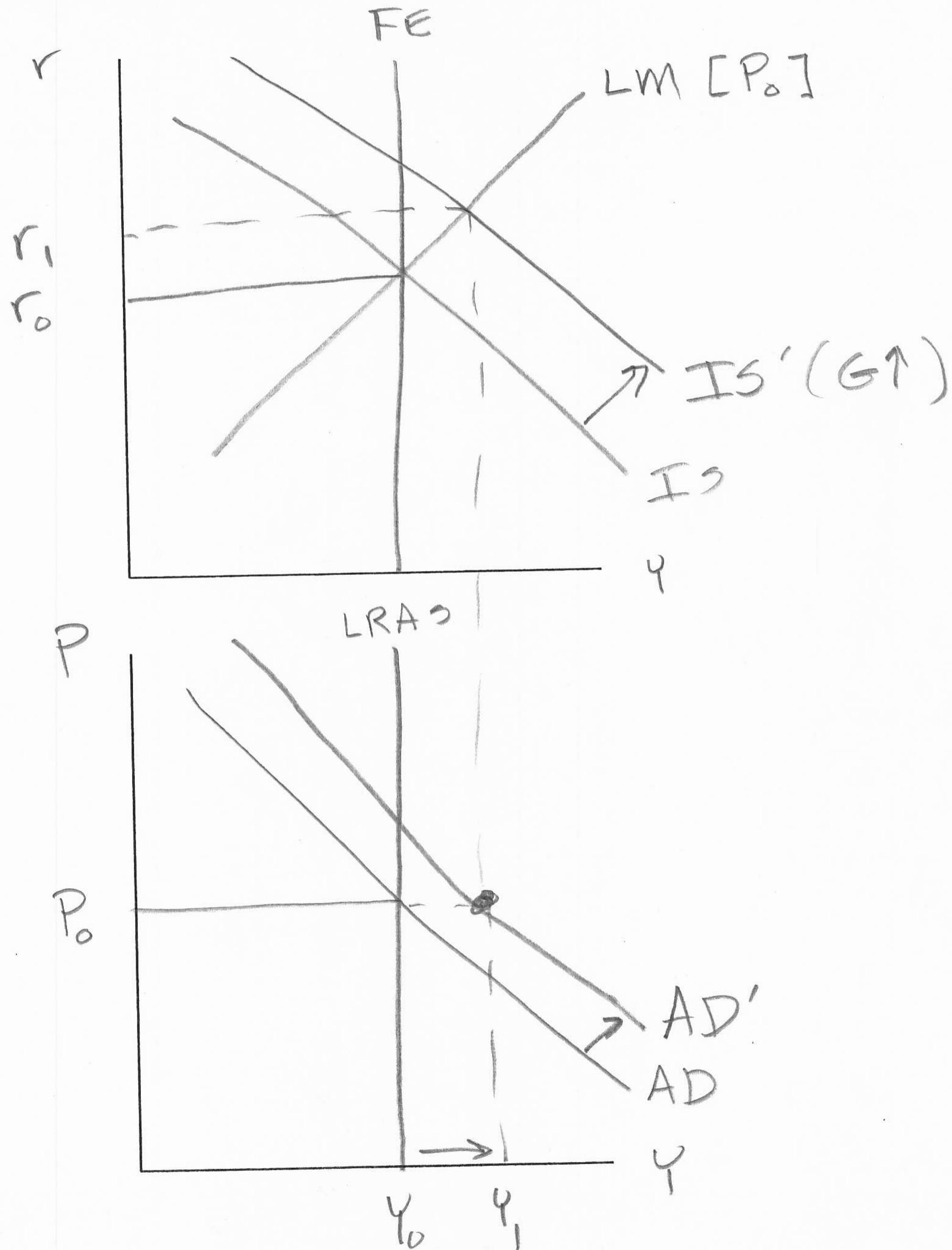
G↑ shifts IS and AD to the right

Weath reduction increases work effort, FE and AS shift right

P rises, causing LM to shift left

Question 2B Keynesian Model (5 points)

In the space provide below, illustrate the consequences of a temporary increase in government spending (to fight a foreign war) in the **Keynesian** model. The upper panel should plot IS, LM, and FE. The lower panel should plot AD, SRAS, and LRAS. You should initially illustrate an economy in long-run general equilibrium. You should then illustrate the consequences of the **government spending shock in the short run**. Be sure to label all axes and curves carefully. If a curve shifts, provide a brief explanation for the shift.



G↑ causes both IS and AD to shift right

Output rises to Y_1

Question 2C Keynesian and Classical Models (5 points)

Do your diagrams (for questions 2A and 2B) show similar qualitative results for the effects of government spending on output and the interest rate? In words, briefly explain how the Keynesian and Classical models account for these results differently.

Both output and the interest rate rise according to both models.

In the classical model the increase in output results from increased work effort in response to a wealth reduction.

In the Keynesian model, when aggregate demand rises, firms meet that demand at a fixed (sticky) price. This behavior is reasonable if (1) firms have market power (2) real wages are rigid perhaps because of "efficiency wages."

The interest rate rise reflects added scarcity of current output (relative to future output) in both models.

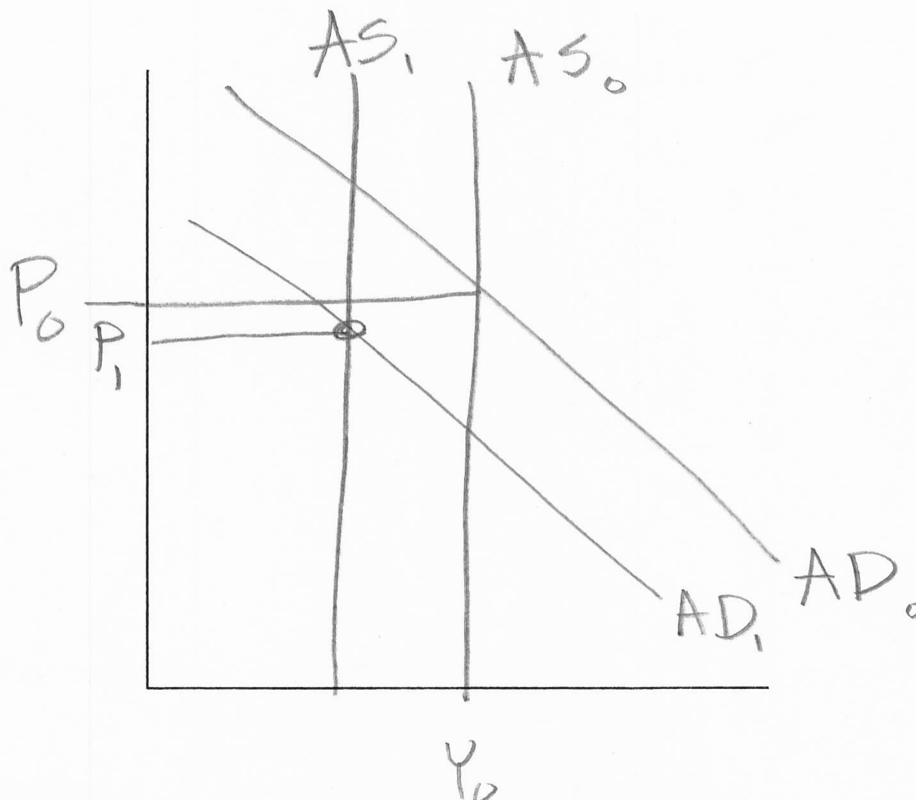
Question 3 The Recession and the Classical Model (15 points)

In Professor Chappell's paper on the recession, he argued that one might interpret financial market turmoil as a supply-shock; that it, the breakdown in financial intermediation could be thought of as reduced availability of an intermediate good in the **classical model**. Under this interpretation, the production function is shifted downward.

Complete the AD-AS diagram below to illustrate the effects of such a shock. Initially assume that the economy is in a general equilibrium. Then illustrate the effects of the financial market shock. Assume that the shock is permanent—the production function shift will NOT reverse itself. Under this interpretation, the shock will affect future output and income, and therefore current wealth. So your diagram should show both (1) the direct effects of the shock to the production function and (2) the effects of a reduction in wealth.

What does your diagram imply about the change in the price level? Is this prediction unambiguous, or does it depend on the magnitudes of curve shifts that you drew?

(Use the next page as needed for your answer).



Wealth down ⇒ AD left

Productivity down ⇒ AS left

P declines in my diagram, but the result is ambiguous, depending on magnitude of shifts