

SECOND MID-TERM EXAMINATION

Professor: David Gray

Student Name: KEY

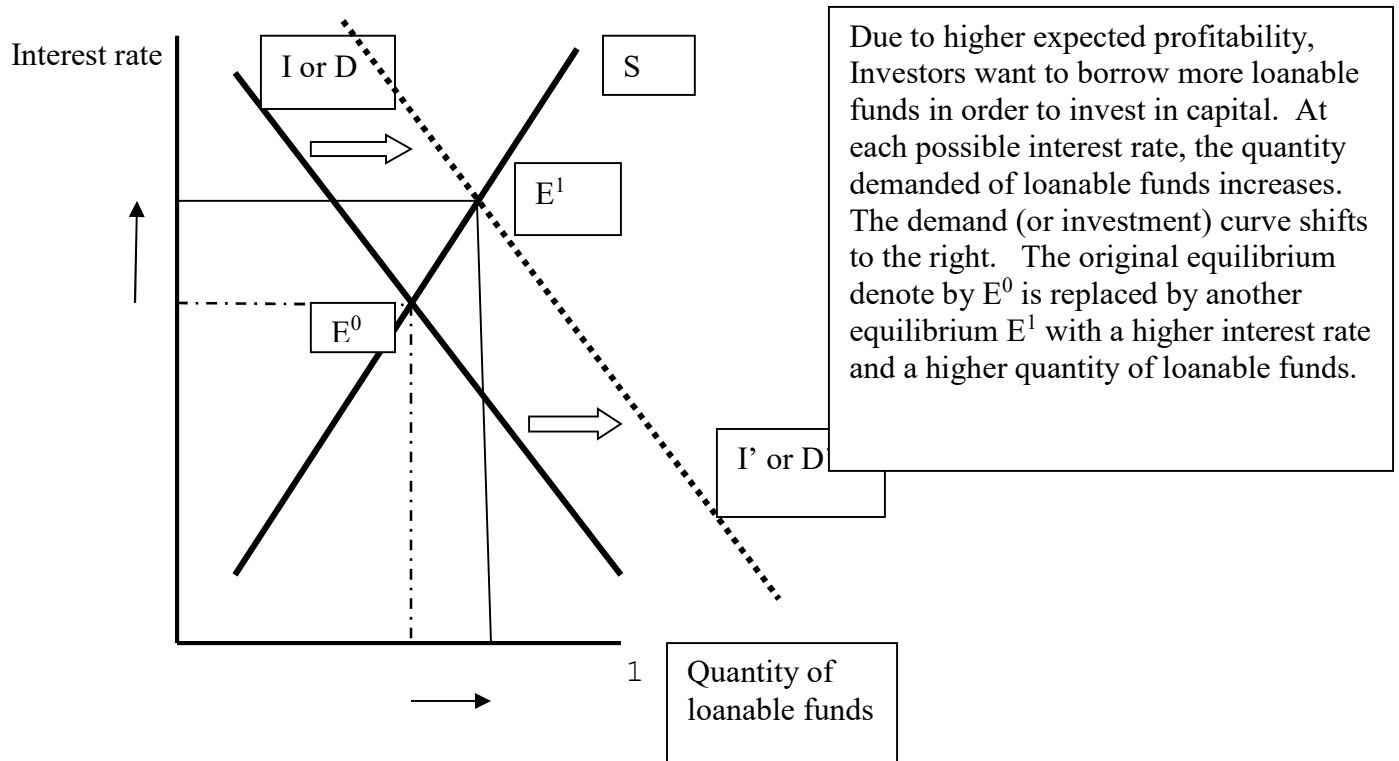
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Student #:

You may not consult with any written documents whatsoever (including other students' papers), and no conversation is permitted while the examination is in progress. Please remove all hats. The use of smart-phones and programmable calculators is strictly forbidden. Turn off all cellular telephones. There are a total of 60 points. Be assured that in almost all cases, the response that I seek has been emphasized in class.

1. (7 points) a) On the axes that are provided below, depict the loanable funds market in equilibrium. Label all axes and curves.

b) On the same figure, show what happens in this market if tax incentives for investment spending are enriched. Indicate which curves, if any, shift, and explain in words how the loanable funds market adjusts. Describe the new equilibrium. Explain your work here.



2. (15 points) Consider the aggregate demand / aggregate supply model of the economy. In the first column of the chart below, I have listed seven different shocks or economic events. In the second, third, and fourth columns, there are labels for the three curves that are the core of this model. The fifth, sixth, and seventh columns, there are labels the direction of a shift of a curve.

- a) For each case, indicate the curve that is involved by placing an 'X' in the corresponding box. If you think that there are effects on both the supply side and the demand side, select the impact that is greater.
- b) For each case, the direction of the shift, if any, by placing an 'X' in the corresponding box.

Nature of shock	Aggregate demand	Short run aggregate supply	Long run aggregate supply	Right	Left	No shift
An increase in exports	X			X		
A stock-market crash	X				X	
A sharp rise in energy costs		X	X (maybe – will accept)		X	
permanent increase in overall productivity		X	X	X		
Output price inflation						X
An increase in the propensity (desire) to save	X				X	
Climate change that damages crops and property and costs lives		X	X		X	

3. (16 points; 4 points each) Identify and give the significance of the following points. This means to mention the context in which I covered them.

a) Financial intermediaries

It is any entity that arranges transactions between savers and borrowers. It brings about equilibrium in the loanable funds market such that savings = investment spending. (see page 367 in the text)

b) The crowding out effect – Indicate which variable does the crowding and which variable gets crowded out.

It has to do with fiscal policy. The government runs a deficit and finances it by borrowing. This restricts the supply of loanable funds, which places upward pressure on interest rates, which in turn reduces private investment spending. It is the public spending and the resulting borrowing that crowds out would-be private investment spending. (see page 365 in the textbook)

c) Stabilization policy

The two types of stabilization policy are fiscal policy and monetary policy. Their common goal is to stabilize the macroeconomy such that the actual level of GDP, or national output, is situated at the natural rate of output, also known as potential GDP. It is also desirable to have low inflation, which implies that prices are fairly stable.

d) Automatic stabilizers

These are changes in government spending and/or changes in taxes that kick in without the government taking any explicit intervention. They are built into the existing tax system and apparatus of social insurance programs. If the economy is in a recessionary state, taxes decrease and government spending (especially unemployment insurance payments) increases automatically. If the economy is in an inflationary state, taxes increase and government spending (especially unemployment insurance payments) decreases automatically. (see page 340 in the text)

4. (12 points; 4 points each) Briefly distinguish between the following pairs of items, pointing out how they differ.

a) public saving versus private saving

public saving (or dissaving) = taxes – government spending = $T - G$. This is the government's account.

private saving = national income – taxes – government spending = $Y - T - C$

national saving = public saving + private saving, which constitutes the total pool of savings available.

- b) Keynesian view of macroeconomic policy versus the classical (and neo-classical) view

The Keynesian view is that macroeconomy is inherently vulnerable and unstable. Sometimes it performs well on its own, but often it does not. The government should frequently intervene in the form of fiscal and/or monetary policy in order to stabilize the macroeconomy.

The classical view is that the business cycle does exist. The economy is in a recessionary or an inflationary state sometimes, but it is capable of righting itself on its own, i.e. autonomously. The natural rate of output is the long-run equilibrium of the macroeconomy, and it will adjust on its own to any shocks, both positive and negative. The government should rarely intervene in attempts to stabilize the macroeconomy, a policy stance that is called 'laissez-faire'.

- c) Debt versus the deficit

The debt is a stock quantity representing the total amount of money that the government owes. The deficit is a flow quantity given by $T - G < 0$. There must be a unit of time specified. See pages 346-347 of the text.

5. (10 points) Consider the government spending multiplier. Suppose that the marginal propensity to consume (MPC) is 0.25.

- a) Interpret the value of the MPC.

If national income increases (decreases) by \$ 1, consumption spending increases (decreases) by \$ 0.25

- b) Determine the value of the multiplier. Show your work.

$$K = 1 / (1 - MPC) = 1 / 0.75 = 4 / 3 = 1.3333$$

- c) Suppose that the government desires to raise aggregate expenditure by \$ 1.3333 billion. By how much should government spending rise? Explain your response.

$\Delta Y = \Delta G * (1.3333)$. Substituting in the given information, $\$ 1.3333 \text{ b} = \Delta G * (1.3333)$, so $\Delta G = \$ 1 \text{ b}$.

- d) Such an intervention will cause the aggregate demand curve to shift to the right. Explain in words how and why this occurs. In other words, what economic force causes it to shift to the right as opposed to sitting still or shifting to the left?

Government spending constitutes an injection of extra spending into the circular flow of the macroeconomy. At each possible level of composite price P, there is greater spending pressure

than there was before. We end up with a new functional relationship between P and GDP.

- e) Suppose that the economy is situated at the natural rate of output, also known as potential GDP. Would such an intervention be advisable? Explain why or why not in words. There is no need to provide a graph.

No, that would not be advisable. Starting in that situation, if there is an expansion of aggregate demand, there will be a short run equilibrium to the right of potential GDP, which is called an inflationary gap. There is a round of output price inflation. The economy is said to 'overheat' because spending on goods and services exceeds the economic capacity to produce them.