



AP[®] Macroeconomics 2001 Sample Student Responses

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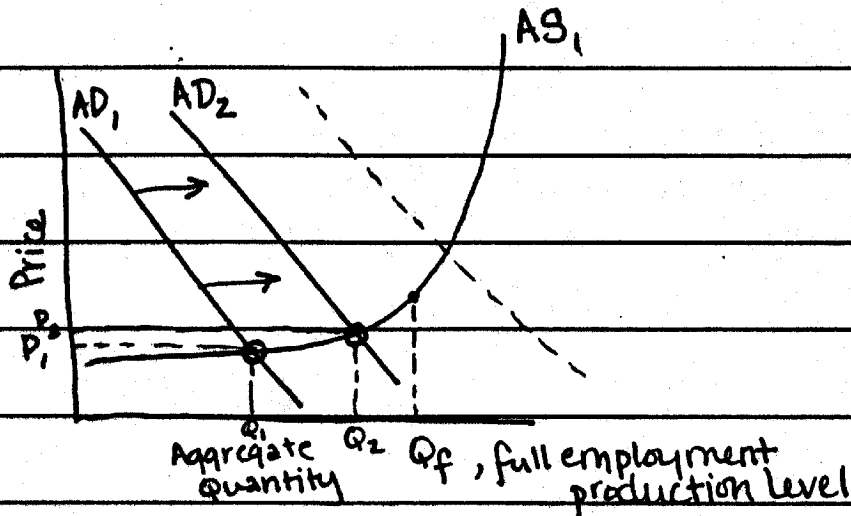
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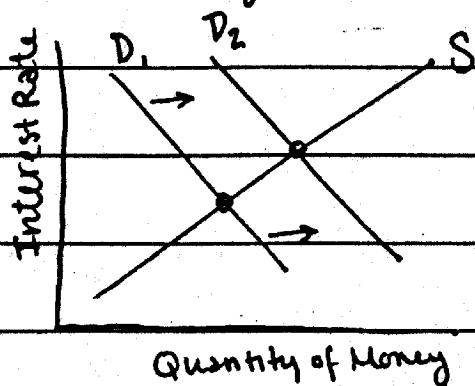
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An increase in government spending will shift aggregate demand to the right, increasing the level of real output from Q_1 to Q_2 . The price level will also increase, but the amount of its increase will ~~depend~~ depend on how far the aggregate demand shifts. In the diagram shown, a large increase in output is accompanied by relatively little increase in price, but the increase in government spending could push aggregate demand to a position indicated by the dashed line which illustrates a substantial price increase.

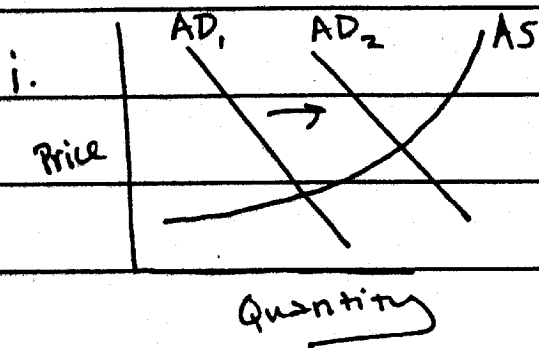
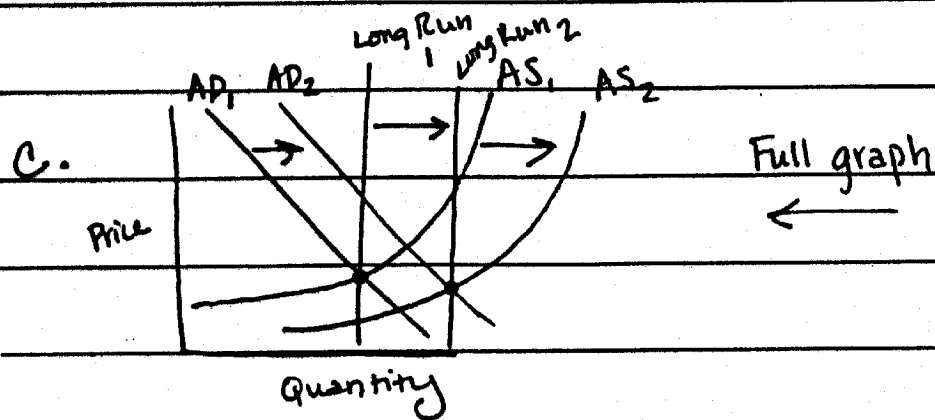
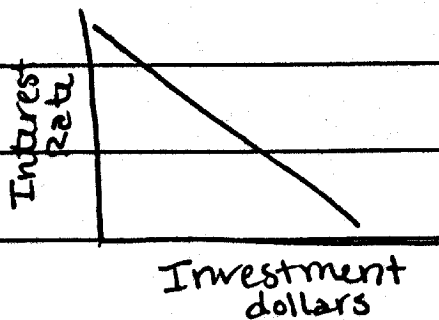
b. The increase in government expenditures will ~~increase~~ ^{shift} the demand for money ^{to the right.} Since interest rate represents the "price" of money this situation can be represented by a supply-demand graph for money.



As pictured in the graph, the increase in government spending will cause interest rates to rise.

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A rise in interest rates will cause a decrease in the amount of investment, since new capital will yield relatively less profit. Since investment requires the loaning of money, companies find it more profitable to invest when interest rates are low and they have to pay back less to borrow the money. If the interest rate is high enough, increased profit from investment may be consumed in interest payments. This relationship is modeled below:



Just looking @ Aggregate Demand

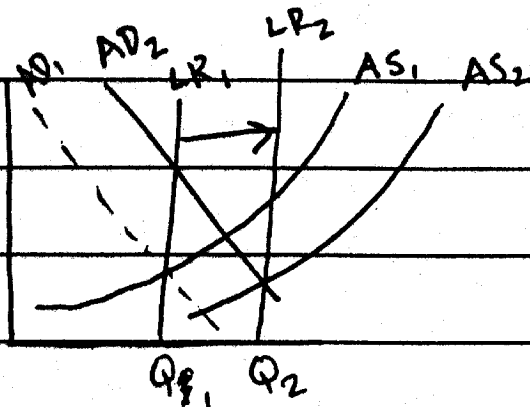
i. A decrease in corporate taxes will leave companies with more money to spend or invest in capital, either way causing aggregate demand to shift right.

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ii.



But the increase in aggregate demand also causes a shift right in aggregate supply since some of the new spending is in capital.

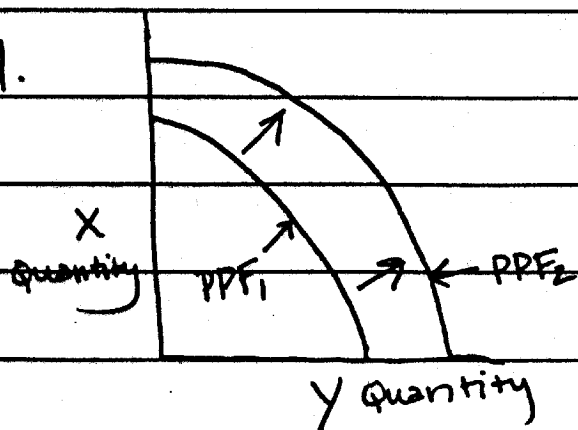
The intersection of AS_2 and AD_2

actually represents a point on the shifted vertical long-run aggregate supply graph. As a result of the capital investment the economy can physically produce more, represented by a shift in the long-run aggregate supply to the right.

iii. With the rightward shift in aggregate supply (long-run and short run) the quantity or real output increases.

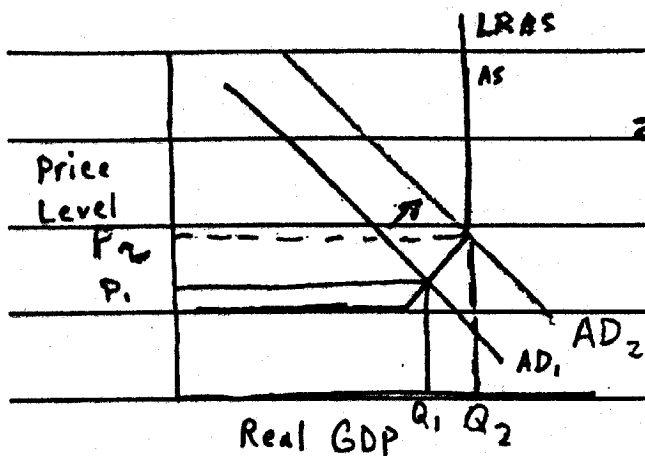
iv. As shown in the full graph on the opposite page, the price level may remain relatively stable. The right shift in AD tends to increase price, but the right shift in AS tends to decrease price. The final price level will depend on the relative effects of these two forces.

d.



Like the shift in long run aggregate supply this indicates increased production capacity of both products X and Y.

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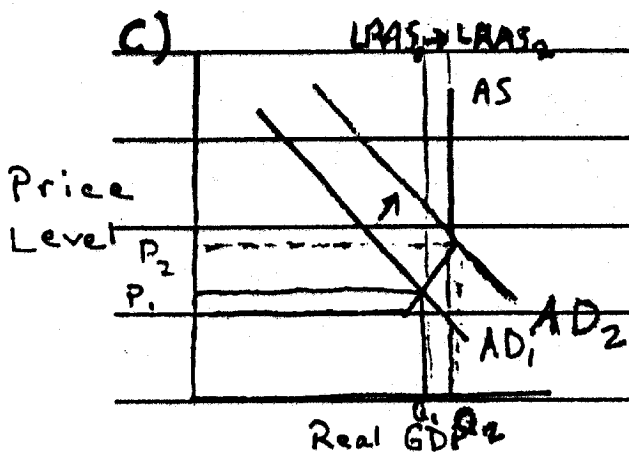


a) i) Output increases from Q_1 to Q_2 as a result of the stimulation of the "G" portion of $(C+I+G+X)$.

ii) Price Level increases from P_1 to P_2 as a result of the effects of demand pull inflation.

b) i) ~~Real~~ Real Interest Rates will increase due to the effects of "crowding out".

In order to finance the newly created budget deficit, the government will have to borrow, this will increase the demand for money, pushing interest rates (the price of money) upward.



i) Aggregate Demand increases. The tax cut will stimulate consumption. In this case, this will result in an increase in the investment portion of GDP.

ii) This increase in investment may lead to an increase in LRAS as firms invest in a larger quantity of capital goods.

ii) This action will result in a decrease in investment. As outlined above, the increase in government spending will increase interest rates. Firms will be less ~~willing~~ willing to borrow at the higher rate, thus decreasing investment.

iii) Real Output increases from Q_1 to Q_2 ...

[continued on next page]

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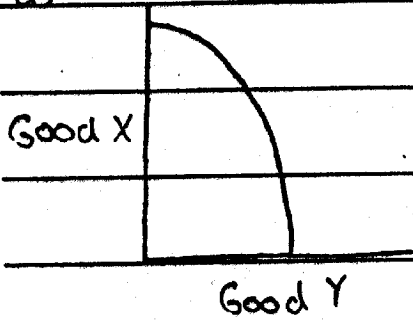
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[C(;;) cont.]

because of the increase in Aggregate Demand.

iv) Price Level will increase, once again due to the effects of Demand-Pull inflation.

d)



I don't think this would result in a change in the PPC. The PPC charts the usage of factors of production (Land, Labor, Capital).

For the PPC to change, there would have to be an increase in quantity (or efficiency)

of one of those factors. As money itself

is not a factor of production, I don't see

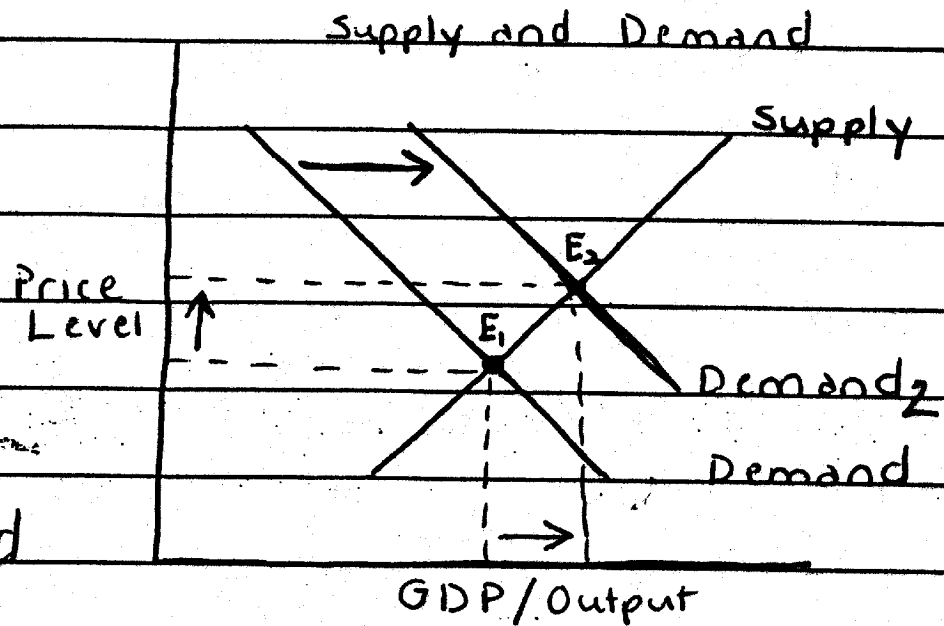
how a tax cut could affect the PPC.

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1 a)

IMAGELLH.

The economy is operating below full employment. Government spending is increased.



When government spending is increased the demand curve shifts rightward.

And equilibrium changes from E_1 to E_2 . Thus. Real Output (i) increases.

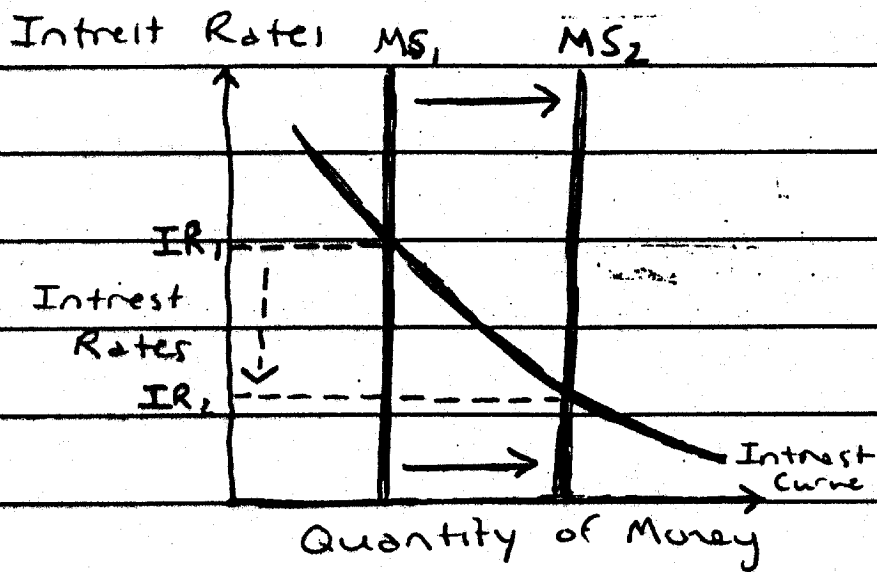
and Price Level (ii) increases.

1 b)

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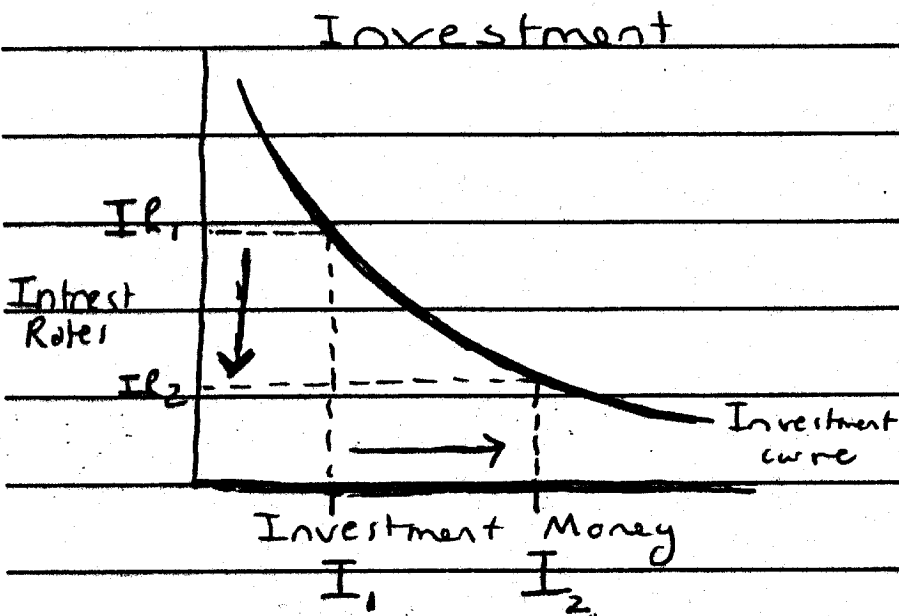
Government Spending has been increased. This means that the money supply will increase due to money from the Government.



When the money supply shifts the interest rates go down.

As shown from IR_1 to IR_2

(i) interest rates decrease



Since money supply has increased and interest rates have decreased

the money that will be invested has increased as

shown from I_1 to I_2

(ii) Investment increases

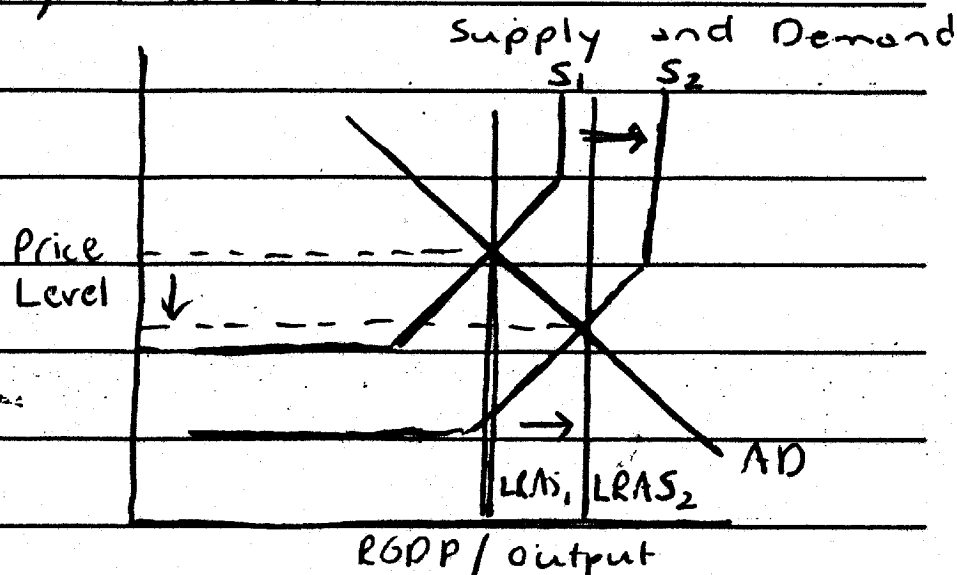
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1 c)

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The government decreases corporate-profits taxes
Thus a corporation will be taxed less
on the money they make.

They will then
produce more to
earn more profit
which they will
keep more of.



(i) Aggregate Demand will not change because a corporate tax will not affect consumers.

(ii) Long Run Aggregate Supply will shift to the right so the companies make more profit

(iii) Real output increases due to supply shift

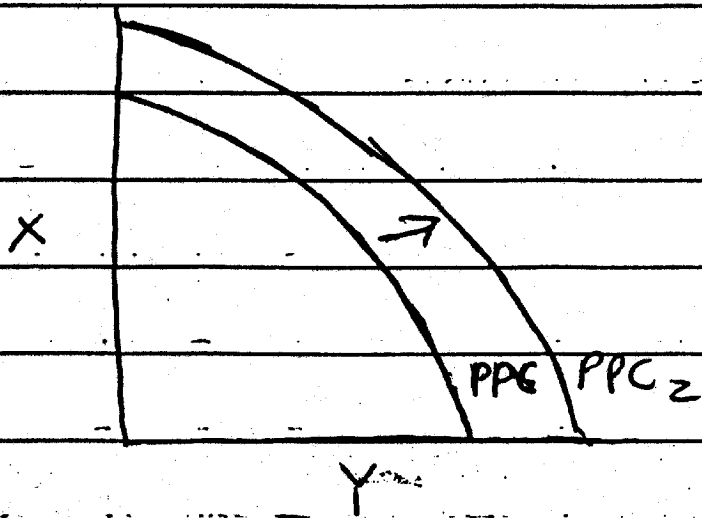
(iv) Price Level decreases due to supply shift.

1 d)

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Production Possibilities Frontier



This decrease in taxes allows the PPC curve to move outward because each firm will now be able to produce more since restrictions have been lifted.