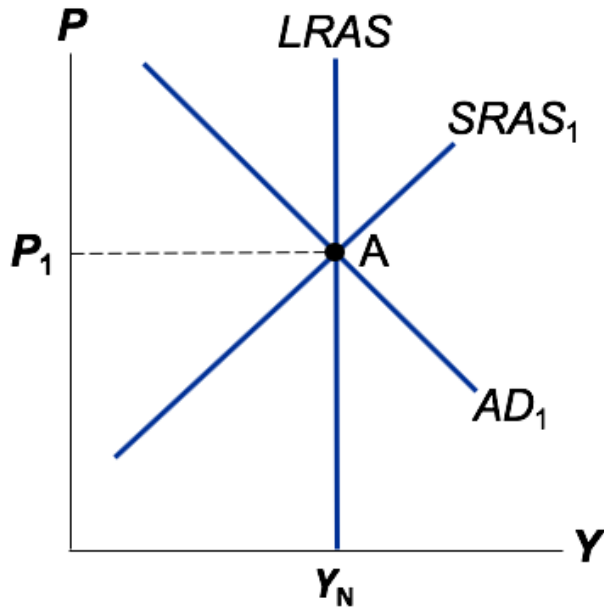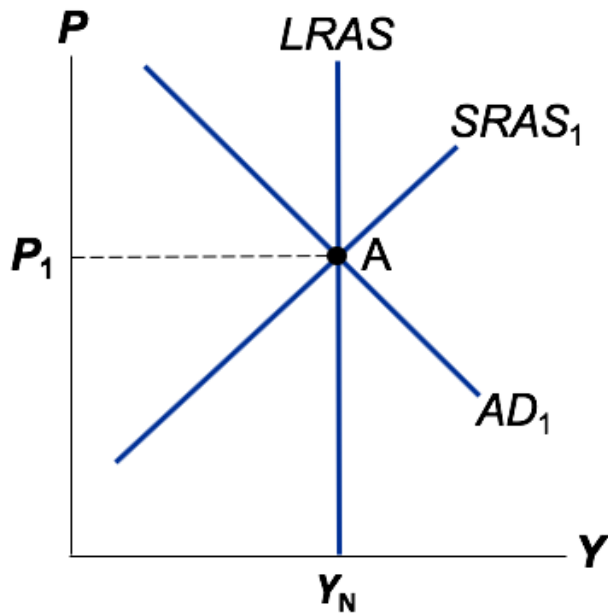# ECO 300 Macroeconomic Theory
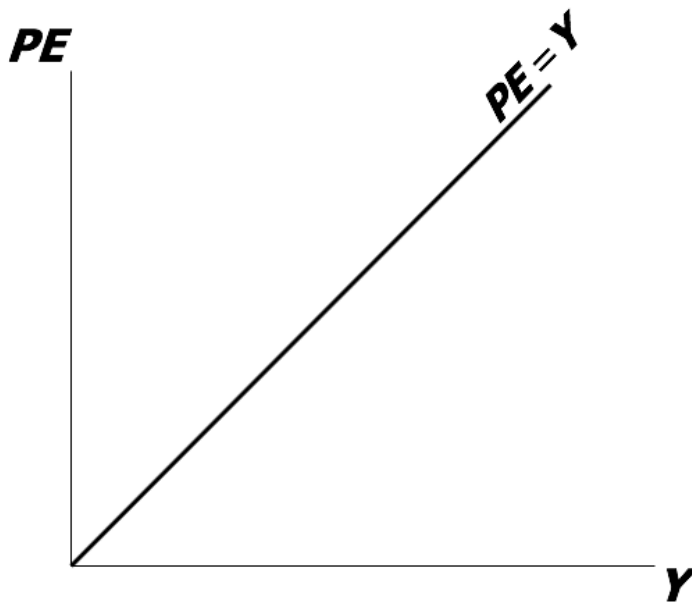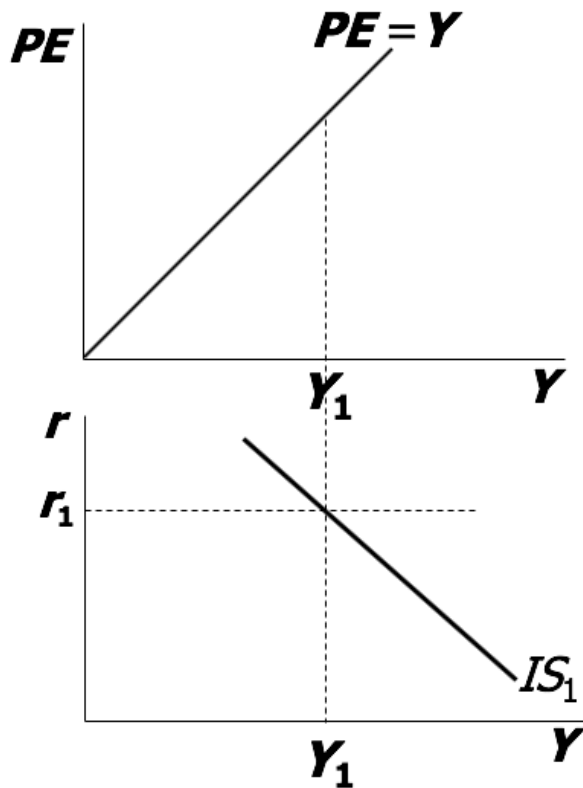## 2nd exam Review for graphical analysis part
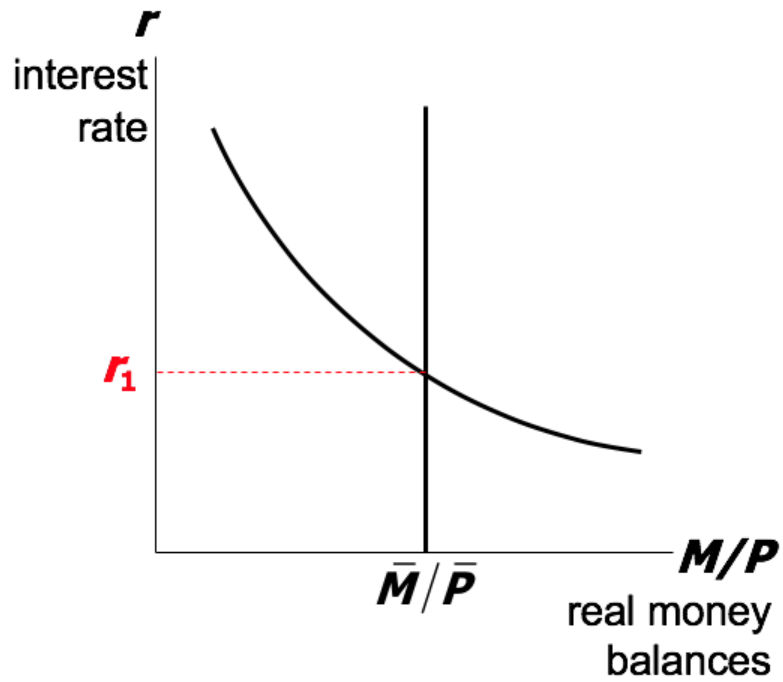
Event: Stock market crash

Event: Oil prices rise

1 Use a graph of the Keynesian cross to show the effects of an increase in planned
   investment on the equilibrium level of income/output.

PE

$PE = Y$

Y

2 Use the diagram of the Keynesian cross or loanable funds model to show how an
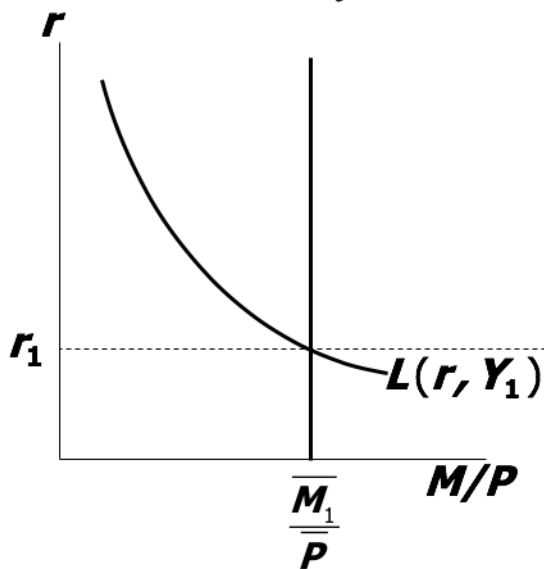   increase in taxes shifts the IS curve. If you can, determine the size of the shift.

PE

$PE = Y$

Y_1

Y

r

r_1

IS_1

Y

Y_1

2 How the Fed raises the interest rate

The graph shows the interest rate r (interest rate) on the vertical axis and M/P (real money balances) on the horizontal axis. A downward-sloping curve intersects a vertical line at $\bar{M}/\bar{P}$. A red dashed line indicates r_1.
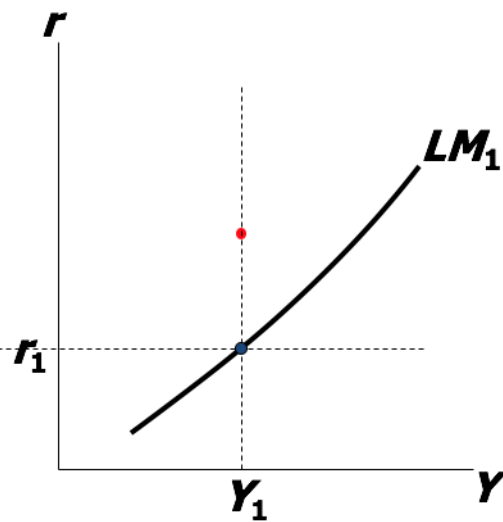
3 Suppose a wave of credit card fraud causes consumers to use cash more frequently in transactions. Use the liquidity preference model to show how these events shift the LM curve.

(a) The market for real money balances

(b) The LM curve

Panel (a): interest rate r on vertical axis, M/P on horizontal axis. Downward-sloping curve $L(r, Y_1)$ intersects vertical line at $\dfrac{\overline{M_1}}{\overline{P}}$, with r_1 indicated by dashed line.

Panel (b): interest rate r on vertical axis, Y on horizontal axis. Upward-sloping LM_1 curve with point at r_1, Y_1.
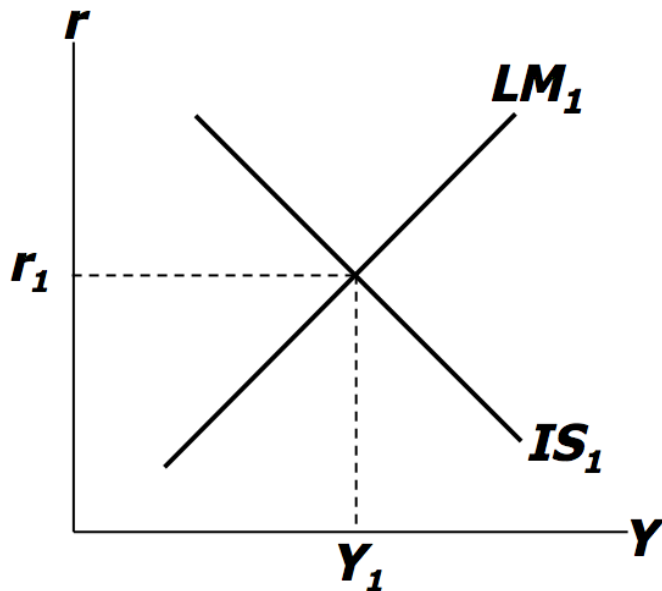
Use the *IS-LM* model to analyze the effects of
1. A housing market crash that reduces consumers' wealth
2. Consumers using cash in transactions more frequently in response to an increase in identity theft
For each shock, use the *IS-LM* diagram to determine the effects on Y and r. Figure out what happens to C, I, and the unemployment rate.

1. Housing market crash

2. Increase in money demand
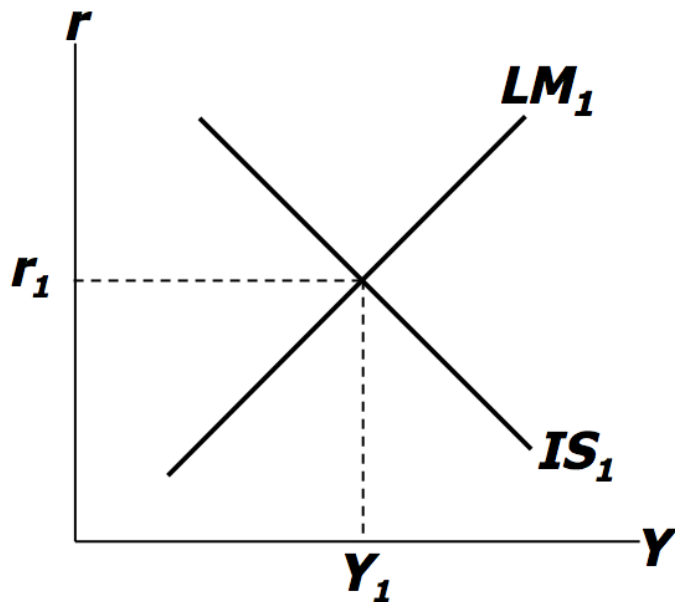
Analyze SR & LR effects of ΔM

a. Draw the *IS-LM* and *AD-AS* diagrams as shown here.

b. Suppose Fed increases **M**. Show the short-run effects on your graphs.

c. Show what happens in the transition from the short run to the long run.

d. How do the new long-run equilibrium values of the endogenous variables compare to their initial values?
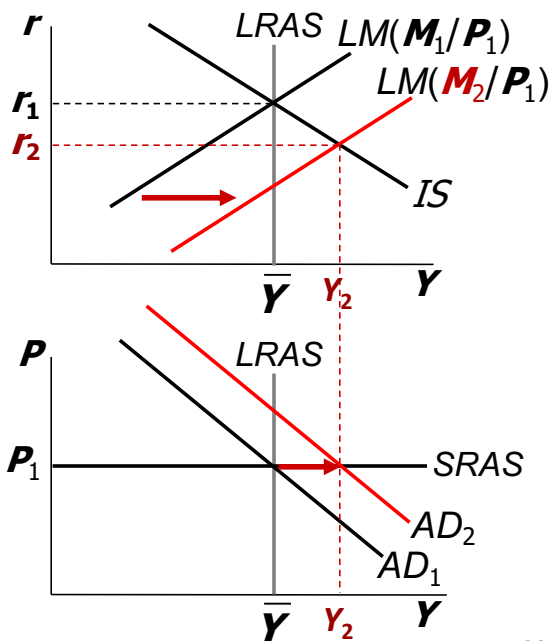

38
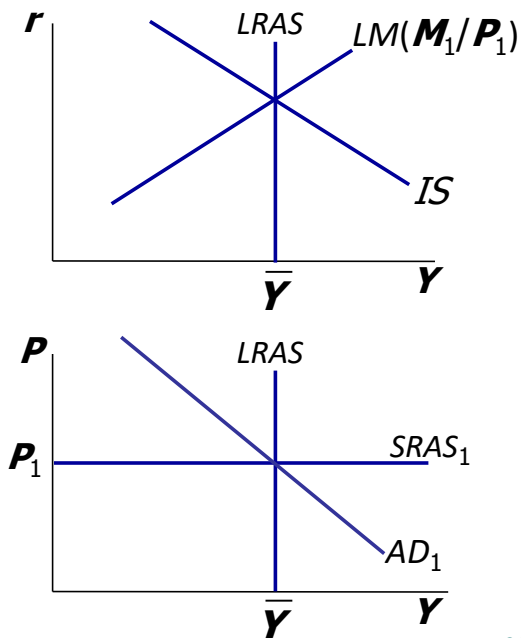
Short-run effects of ΔM

LM and *AD* shift right.

r falls, **Y** rises above $\overline{Y}$
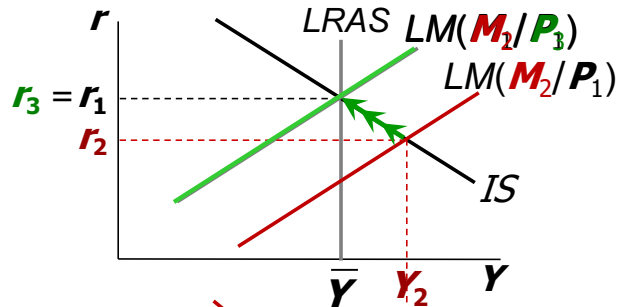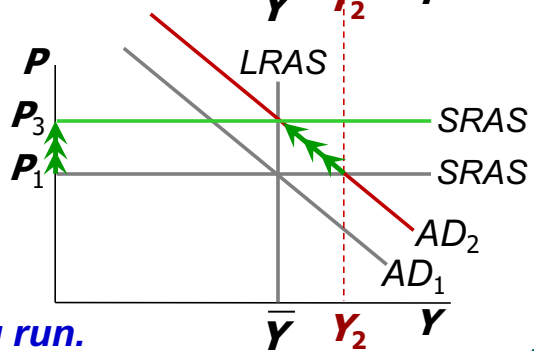

39

Transition from short run to long run

Over time,

- **P** rises
- *SRAS* moves upward
- **M**/**P** falls
- *LM* moves leftward

New long-run eq'm

- **P** higher
- all *real* variables back at their initial values

Money is neutral in the long run.

40