Monetary Neutrality

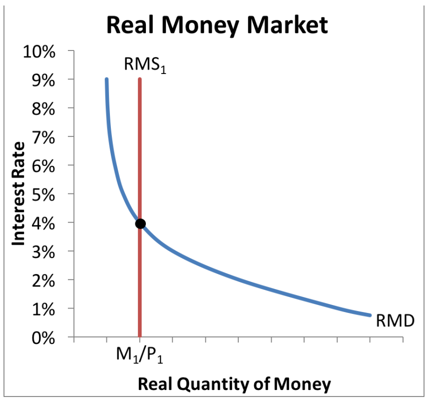
Homework

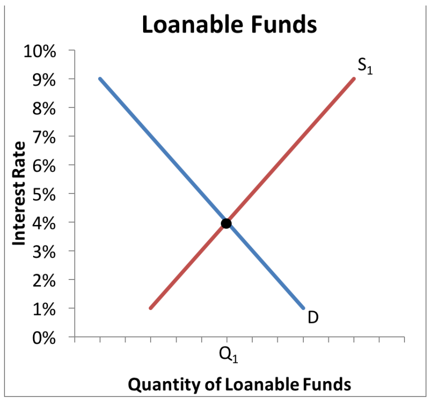
MONEY IS NEUTRAL IN THE LONG RUN

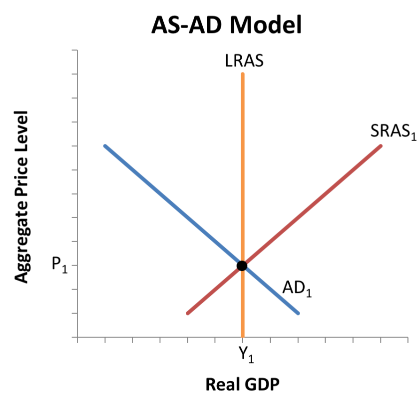
Monetary policy has no real effects on real GDP in the long run, a concept known as monetary neutrality. To see why this is true, match each Event from the box with the correct graph and indicate how each Event affected quantity and the interest rate or price level. Then, illustrate each Event on the graph and describe what would "Cause" each Event to have occurred. (This is expansionary monetary policy.)

Events

1) The real money supply increases.
2) Aggregate demand increases.
3) The supply of loanable funds increases.
4) The short-run aggregate supply decreases.
5) The real money supply decreases.
6) The supply of loanable funds decreases.







In the Short Run

Event: ____________

Quantity: ____________

Interest Rate: ____________

Cause: ____________________

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In the Short Run

Event: ____________

Quantity: ____________

Interest Rate: ____________

Cause: ____________________

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In the Short Run

Event: ____________

Quantity: ____________

Interest Rate: ____________

Cause: ____________________

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In the Long Run

Event: ____________

Quantity: ____________

Interest Rate: ____________

Cause: ____________________

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In the Long Run

Event: ____________

Quantity: ____________

Interest Rate: ____________

Cause: ____________________

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In the Long Run

Event: ____________

Quantity: ____________

Interest Rate: ____________

Cause: ____________________

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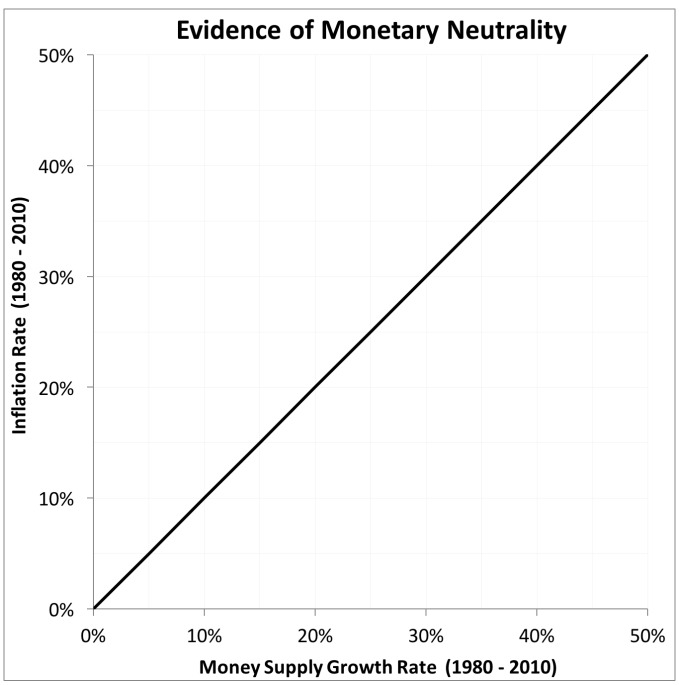
EVIDENCE OF MONETARY NEUTRALITY

We can use real world data to verify the theory of monetary neutrality. This table contains data on several countries from 1980 - 2010. Plot the average annual percent increase in the money supply and the price level on the graph. Then, answer the questions.

Country	Money Supply Average Annual Percent Increase 1980 - 2010	Price Level Average Annual Percent Increase 1980 - 2010
United States	7%	3%
Albania	18	18
Canada	10	3
Colombia	22	18
Germany	5	2
Iran	27	20
Jamaica	23	20
Mexico	34	31
Mongolia	44	33
Nigeria	27	25
Pakistan	15	10
Romania	40	46
Uruguay	40	36
Zambia	36	41



QUESTIONS

1) Monetary neutrality theorizes that any increase in the money supply will be matched by an equal increase in the price level in the long run. If this is the case, where should all of the points on the graph lie?

2) Does the data support the theory of monetary neutrality? Explain.

3) Monetary neutrality also theorizes that changes in the money supply only affect nominal variables, not real variables. How would expansionary monetary policy affect each of the following variables in the long run? Write increase, decrease, or no change.
   a) Nominal Money Supply: ______________
   b) Real Money Supply: ______________
   c) Nominal GDP: ______________
   d) Real GDP: ______________
   e) Nominal Price Level: ______________
   f) Real Price Level: ______________
   g) Nominal Wages: ______________
   h) Real Wages: ______________
   i) Unemployment Rate: ______________

4) If monetary policy has no long-run effects, why is it so important for the economy?