

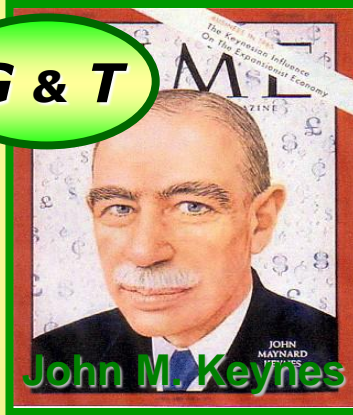
No "G"



Adam Smith

Classicals

G & T



John M. Keynes

Keynesians

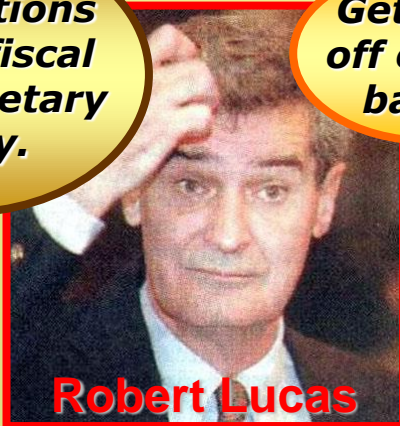
**3-5%
Monetary
Rule**



Milton Friedman

Monetarists

**Expectations
negate fiscal
and monetary
Policy.**



Robert Lucas

Rational Ex.

**Get the G
off of our
backs.**



Ronald Reagan

Supply-siders

Keynesian Based
Monetary Policy matters
Fiscal policy matters
Money supply matters
Anticipations matter
AS fiscal policy matters

Mainstreamers

Disputes In Macroeconomics

Once upon a time,
In a land far, far, away

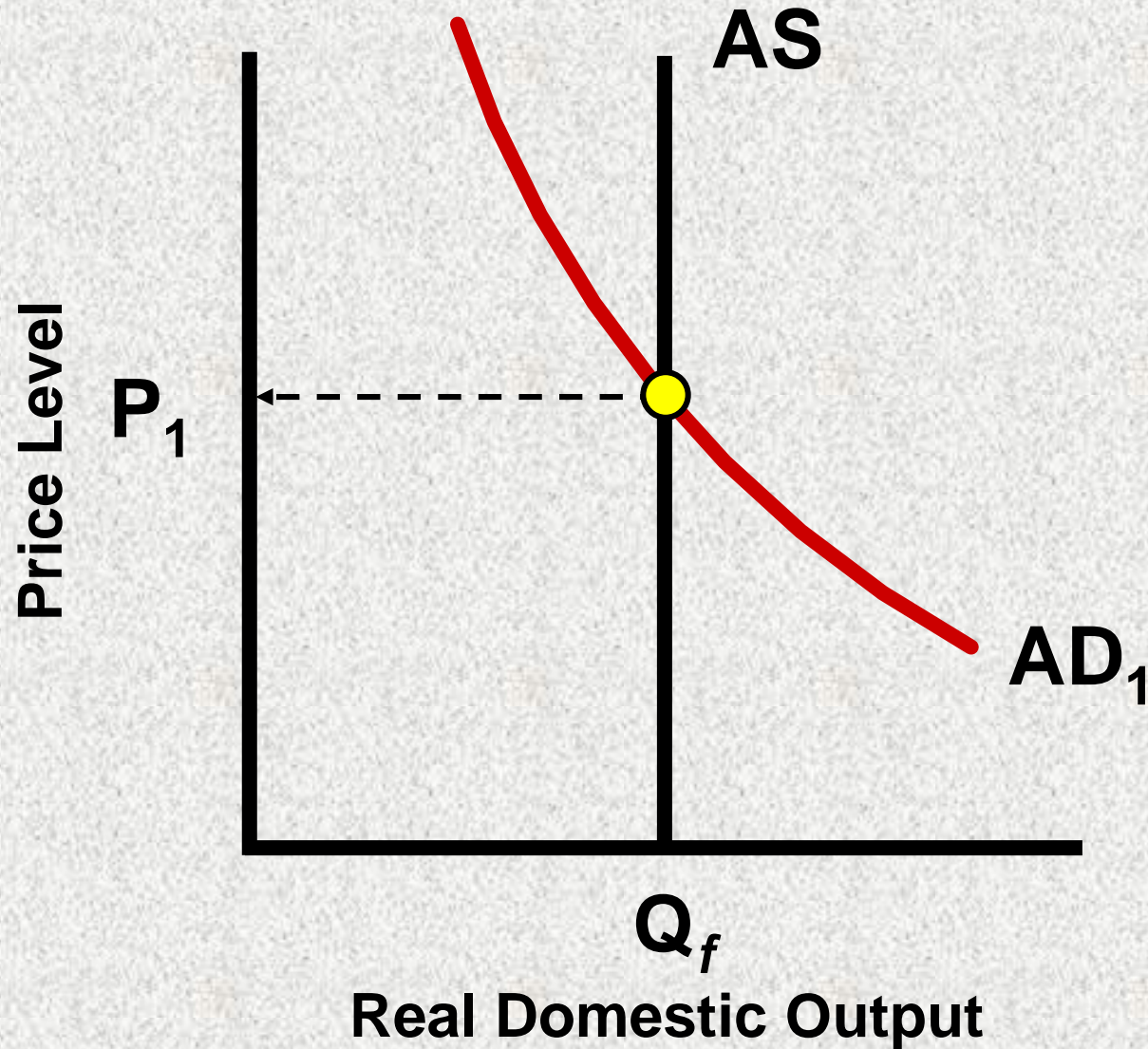


There were a group of people
called the Classical Economists

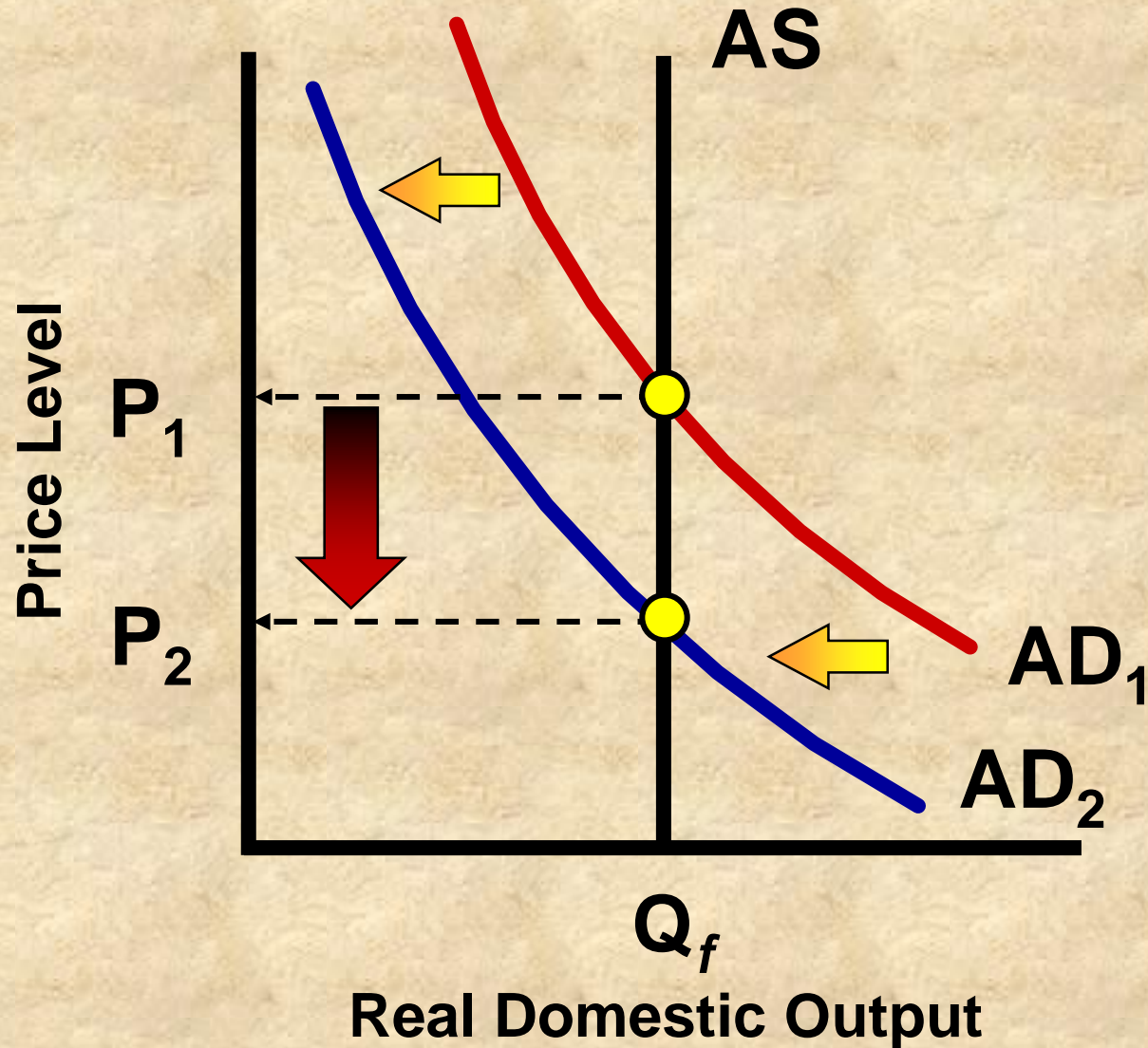
IN CLASSICAL LAND THEY BELIEVED...

- Full employment is the norm.
- Laissez-faire “Let it be”
- Vertical Aggregate Supply Curve
- Stable Aggregate Demand
- Real Output Depends Upon...
 - 1.. *Say’s Law (S creates its own D)*
 2. *Responsive, Flexible, Prices and Wages*

Classical Theory



Classical Theory



In Keynesian Land...

- Their hero and leader was John Maynard Keynes



The Keynesians believed...

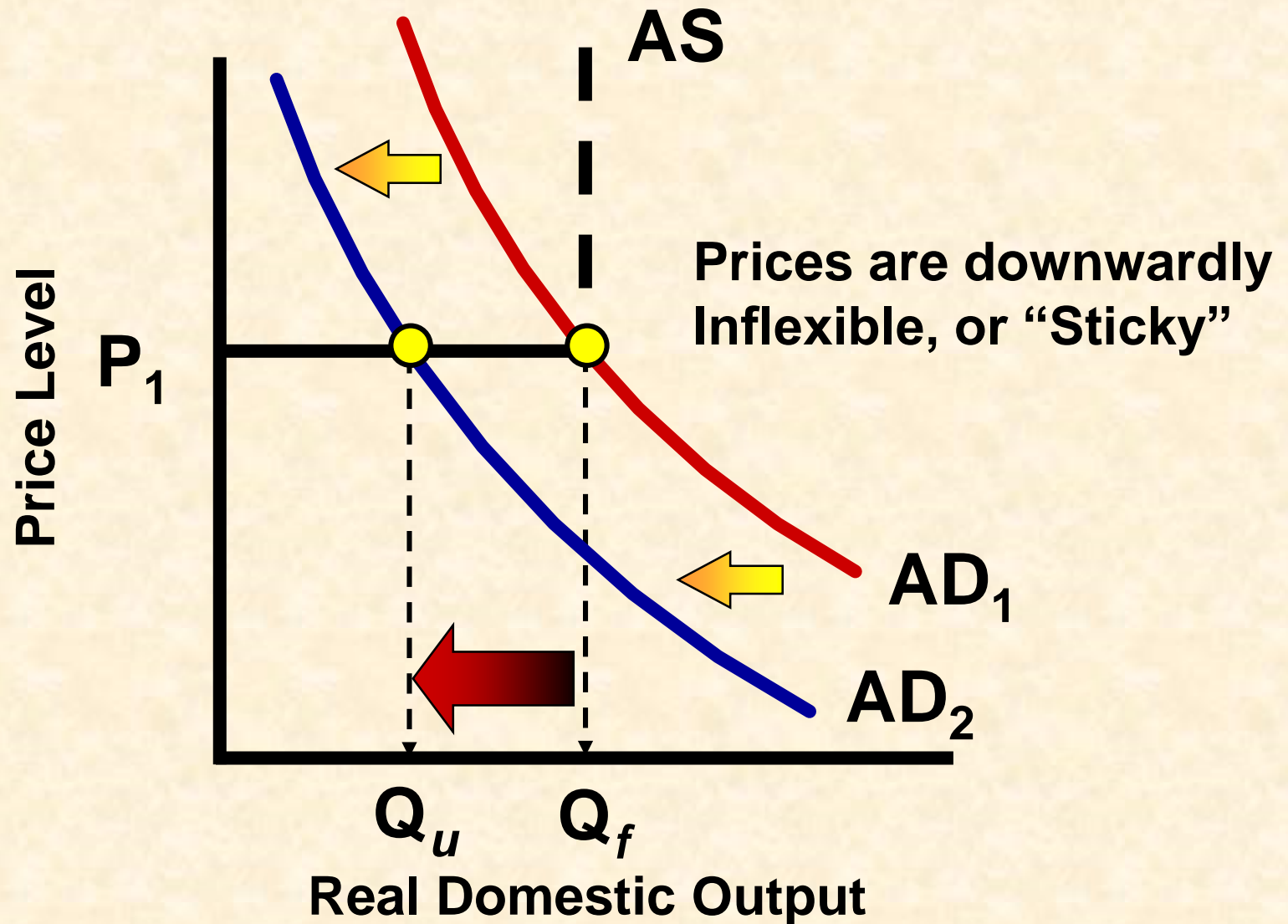
- Active government policy is needed to stabilize the economy.
- “Laissez-Faire” is subject to recessions and widespread unemployment
- AD is Unstable (Investment fluctuates)
- Prices and Wages Downwardly Inflexible
- Horizontal AS Curve to Full-Employment



Free gifts to every kid in the world? Are you a Keynesian or something?

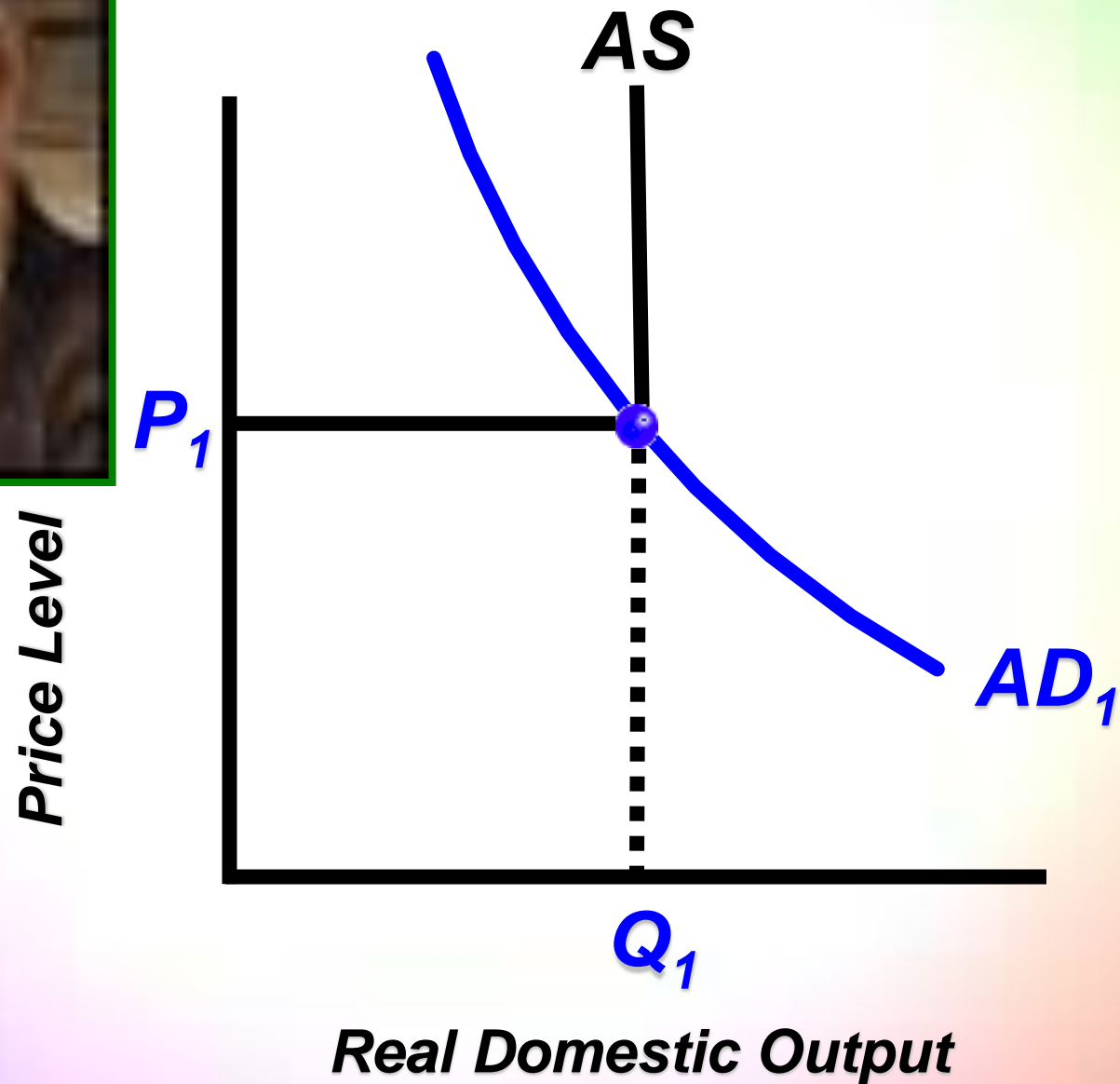


Keynesian View





Keynesian View



Keynesian View

“The economy has fallen and can’t get up.”



Prices and wages are
downwardly inflexible

Active government policy required
to stabilize the economy

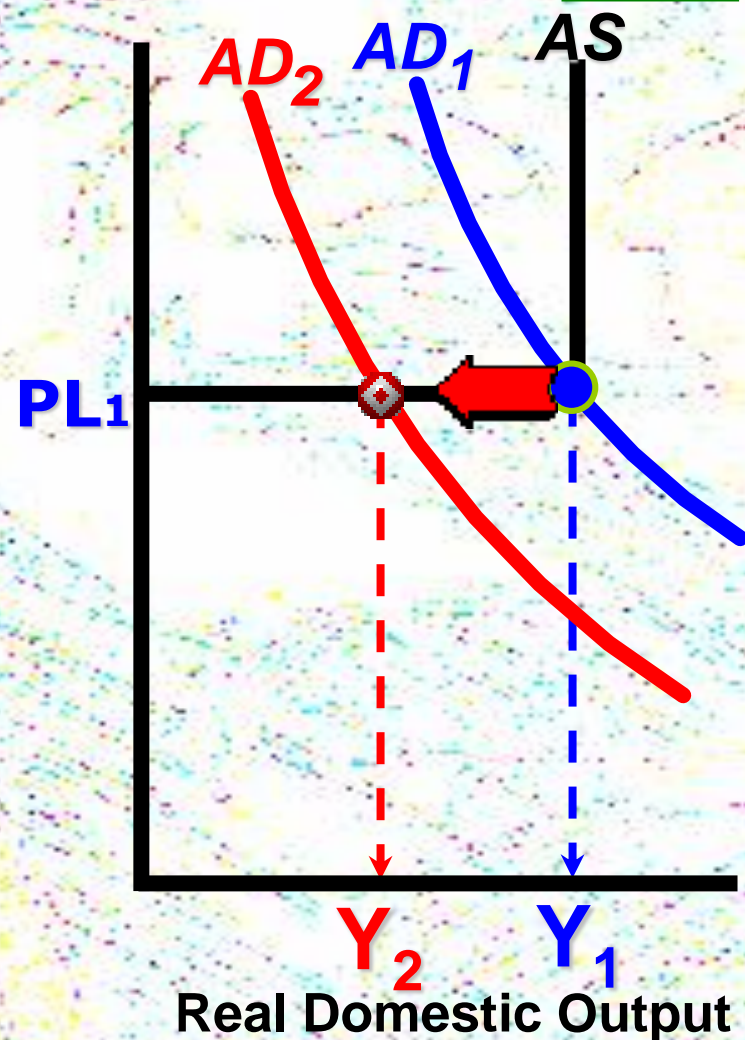
Horizontal AS to Full-Employment

Unstable AD [because of investment]

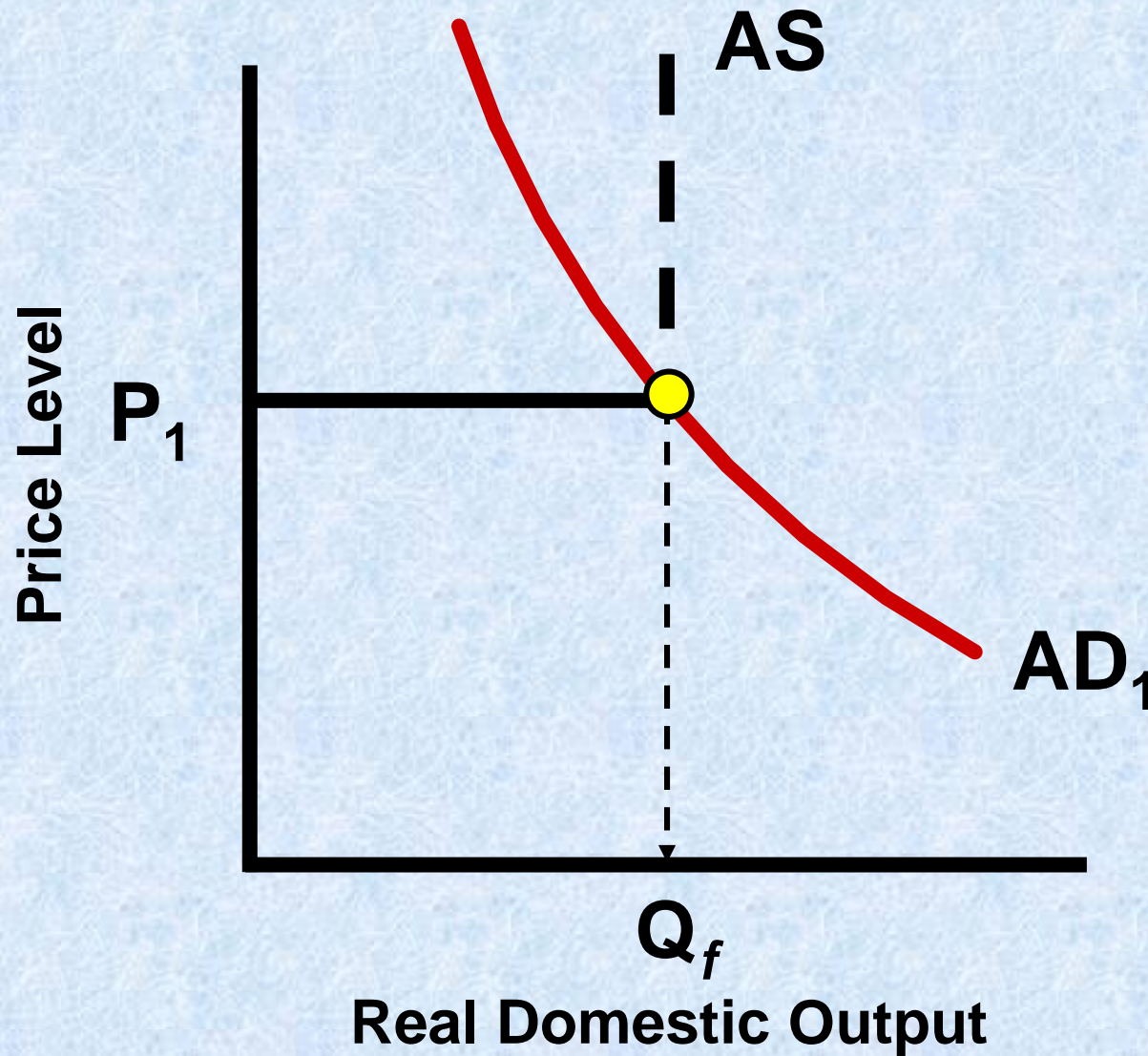
G is needed to move the economy
out of *recession*

*“Businesses don’t let
prices fall so easily”*

*“Workers don’t let
wages fall so easily.”*

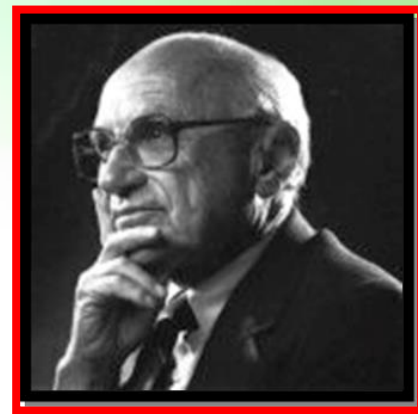


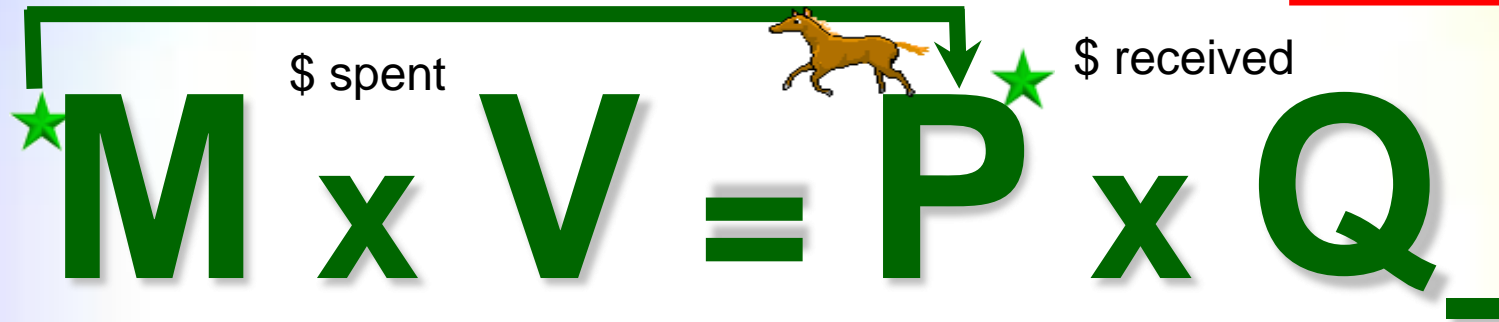
Keynesian View



The Equation of Exchange or Quantity Theory of Money

MV x PQ was the cornerstone of Classical theory.




$$\text{★} M \times V = P \text{★} \times Q$$

1. **Velocity is stable.**
2. The amount of goods/services that can be produced is **fixed** in the short run.
3. If the **Fed increases the MS by 15%**, we will see a **proportional 15% increase in prices.**
4. **V and Q aren't in the equation & a change in MS will result in a change in P.**



Let's Take A Look At Milton Friedman's License Plate

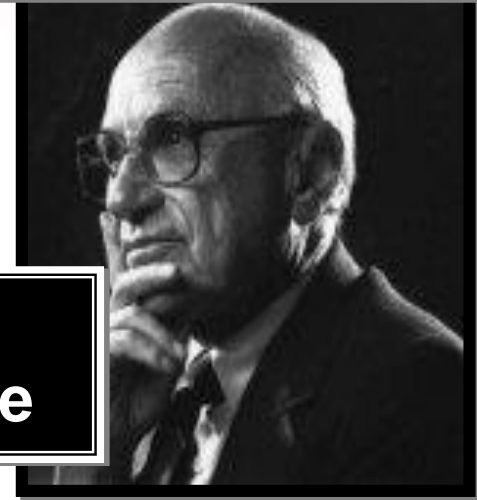


Fiscal Policy



The Keynesian - Monetarist Debate

Monetary Rule



Keynesian View

**Velocity is not stable or predictable.
So an increase in M or V could increase P.**

$$\uparrow M \quad \uparrow V = \uparrow P \quad Y$$

Thus, no monetary rule policy.

MS needs to be adjusted.

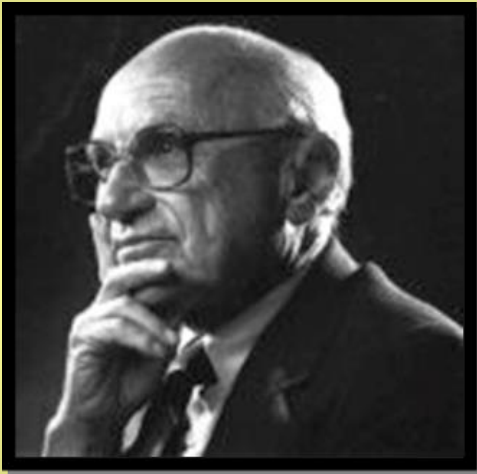
Monetarist View

**Velocity is stable and
predictable.**

**The Fed cannot predict
short-run variations in V.**

**Adjustments to M will be
wrong and destabilizing.**

Monetarists



Friedman

Monetary Rule 3-5%

Motto:

“Increase the MS 3-5% year”

$$M \times V = P \times Q$$
A red line connects the 'M' and 'P' in the equation $M \times V = P \times Q$. A red arrow points from the 'M' to the 'P', indicating a relationship or flow between the two variables.

**Quantity theory of Money
Equation of Exchange**





MAINSTREAM ECONOMISTS

[New Keynesian] – Keynesian based

- The economy is **stable but potentially unstable** [supply shocks or booms and busts impact investment].
- Many **prices/wages** are **inflexible downward**, particularly **wages** [contracts and **efficiency wages**].
- **Velocity** is **unstable** [direct with the **interest rate** and **inverse** with the **money supply**]
- **Inflation** can be caused by **excess MS**, but it may also be caused by “**investment booms**”, or “**adverse supply shocks**.”
- The Fed **targets the interest rate in the SR** but **monitors the MS in the LR**.

CAUSES OF MACRO INSTABILITY

Mainstream View (Keynesian)

Changes in Investment

$$C_a + I_g + X_n + G = \text{GDP}$$

***Adverse Aggregate Supply
Shocks***

Monetarist View (Classical)

Equation of Exchange

$$M V = P Q \quad (\text{Nom. GDP})$$

Stable Velocity

CAUSES OF MACRO INSTABILITY

Summary

Mainstream View (Keyensian)

***Instability of Investment is the
Main Cause of Output Changes
Monetary Policy is a
Stabilizing Factor***

Monetarist View (Classical)

***With a Stable Velocity,
Nominal GDP Depends Upon
the Money Supply***

DOES THE ECONOMY SELF-CORRECT?

Mainstream View

Downward Wage Inflexibility

Efficiency Wage Theory

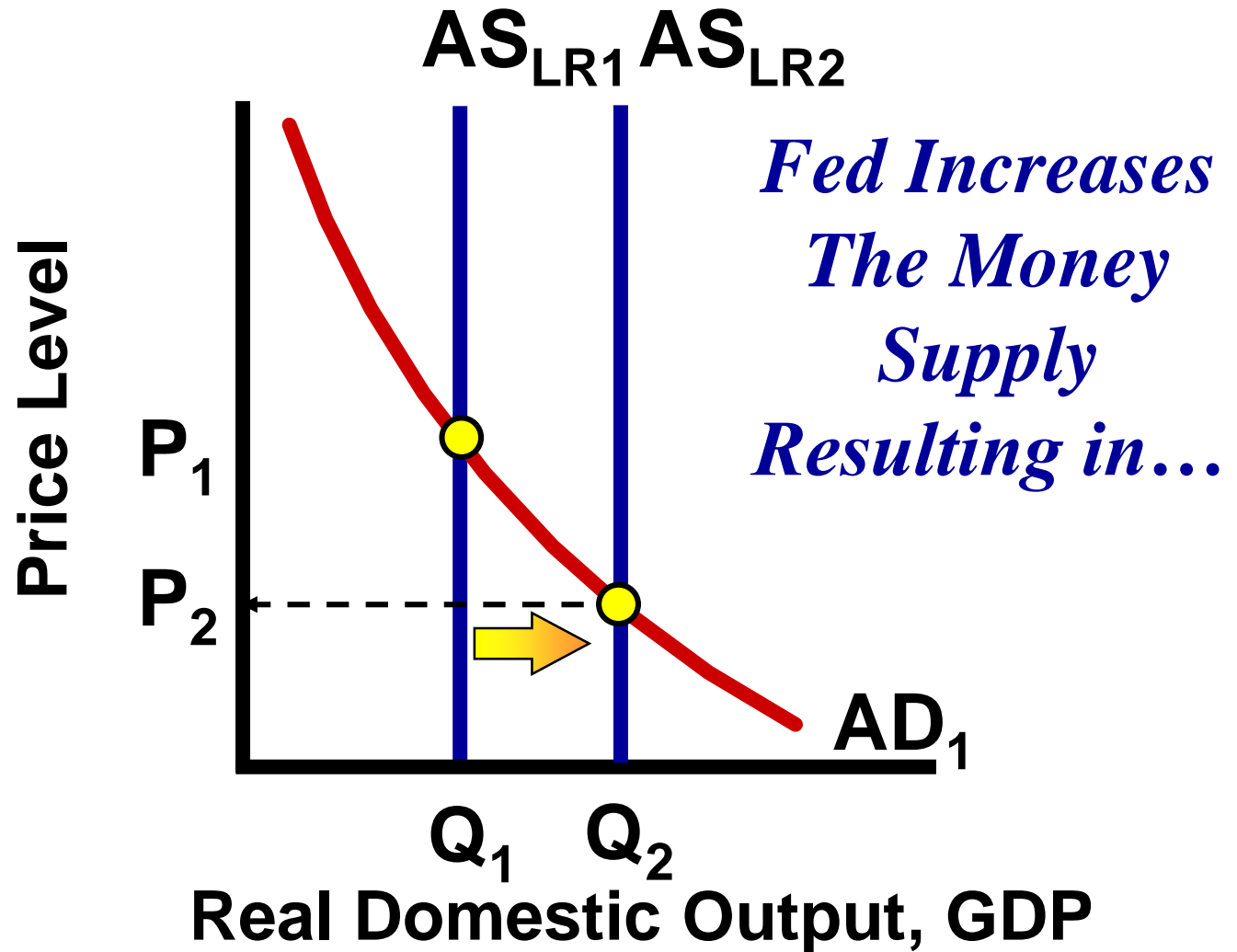


- **Greater Work Effort**
- **Lower Supervision Costs**
- **Reduced Job Turnover**

Insider-Outsider Theory and Relationships

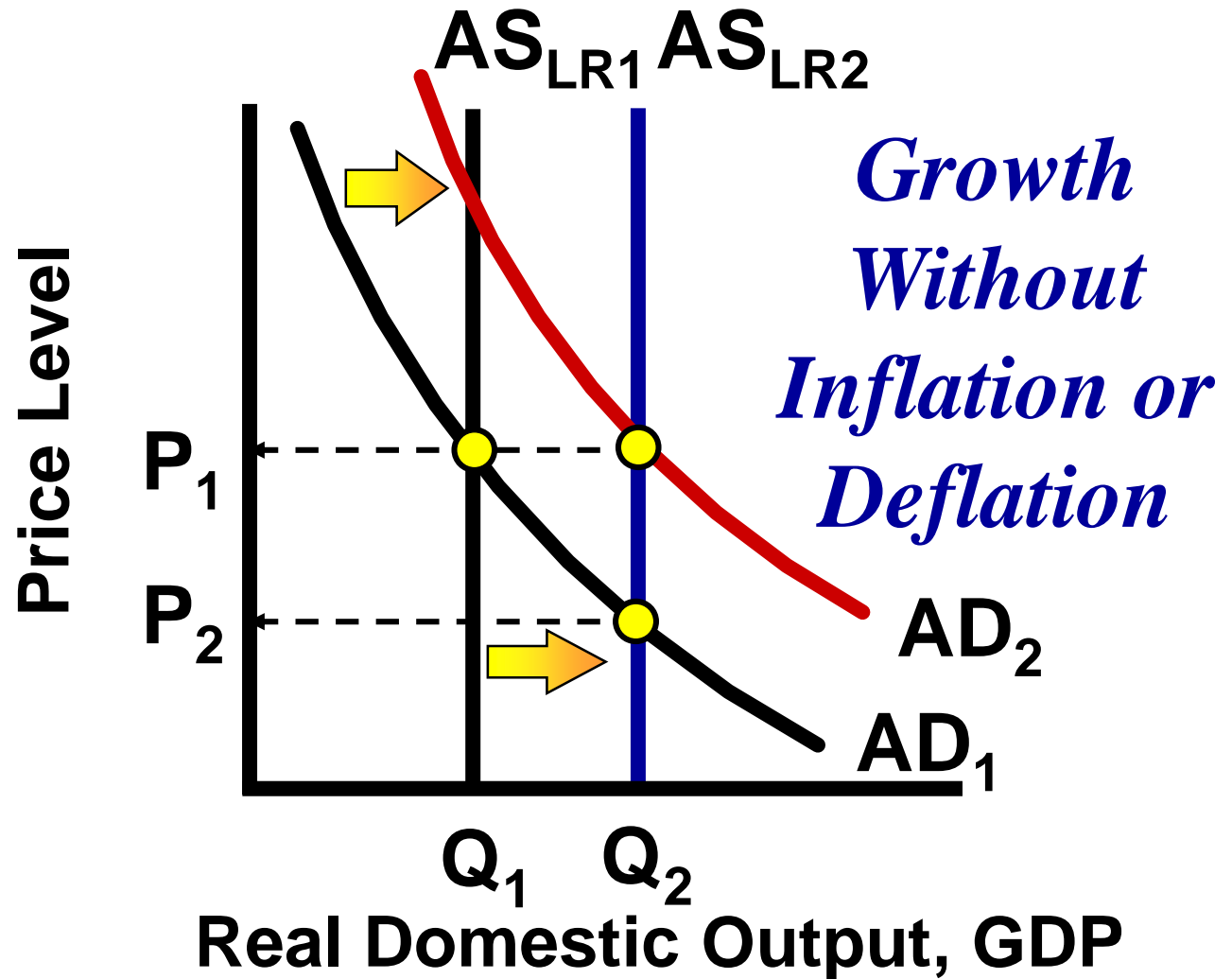
RATIONALE FOR A MONETARY RULE

*Federal Reserve Increases Money Supply at
the Long-Run Growth Rate of GDP*



RATIONALE FOR A MONETARY RULE

*Federal Reserve Increases Money Supply at
the Long-Run Growth Rate of GDP*



Classical/Keynesian Economics

22. (80%) Which argument is typically associated with **classical economists**?
- a. A market economy is self-correcting and thus will not remain in a recession indefinitely.
 - b. A market economy has stable prices and thus is usually free from inflation.
 - c. A market economy requires a strong government to ensure that the market meets the needs of the people.
 - d. A market economy needs only moderate assistance from the government to avoid an extended recession.
 - e. A market economy eventually results in monopolies in both the input & output markets.
23. (62%) According to the **Keynesian saving schedule**, when **aggregate income increases** by a given amount, **savings will**
- a. remain the same
 - b. decrease by the amount of the change in income
 - c. increase by the amount of the change in income
 - d. increase by less than the amount of the change in income
 - e. increase by more than the amount of the change in income
24. (49%) An **important assumption in Keynesian theory** is that
- a. prices are rigid downward & decreases in AD will lead to an increase in unemployment.
 - b. price rigidity will cause downturns in the economy to self-correct.
 - c. When AD is inadequate, prices will fall.
 - d. When interest rates are high, many businesses borrow money.
 - e. changes in the money supply are the major cause of changes in real output & price level.

29. (35%) According to **Keynesian theory**, the **most important determinant of saving and consumption** is the
- a. interest rate
 - b. price level
 - c. level of income
 - d. level of employment
 - e. flexibility of wages and prices
30. (70%) An **inflationary gap could be reduced by**
- a. an increase in government spending
 - b. an increase in the supply of money
 - c. an increase in the income tax rate
 - d. a decrease in the discount rate
 - e. a decrease in the reserve requirement
- means less DI & less "C", which decreases AD**
31. (75%) Which of the following would most likely **lead to a decrease in AD**?
- a. a decrease in taxes
 - b. a decrease in interest rates
 - c. an increase in household savings
 - d. an increase in household consumption
 - e. an increase in business firms' purchases of capital equipment from retained earnings
- means less "C", which decreases AD**
32. (52%) Which of the following would **result in the largest increase in AD**?
- a. \$30 billion increase in military spending and a \$30 billion open-market purchase of G bonds
 - b. \$30 billion increase in military spending and a \$30 billion open-market sale of G bonds
 - c. \$30 billion tax cut and a \$30 billion open-market sale of G bonds
 - d. \$30 billion tax increase and a \$30 billion open-market purchase of G bonds

Both policies expand real GDP, but one answer in each of the others contracts real GDP.

35. (81%) The **value of the spending multiplier (ME)** decreases when

- a. tax rates are reduced
- b. exports decline
- c. imports decline
- d. government spending increases
- e. the marginal propensity to save increases

If MPS incr from .10 to .20, the ME would decrease from 10 to 5.

36. (75%) Which of the following policies would a **Keynesian recommend** during a period of **high unemployment and low inflation**?

- a. decreasing the MS to reduce AD
- b. decreasing taxes to stimulate AD
- c. decreasing government spending to stimulate AS
- d. balancing the budget to stimulate AS

37. (47%) Which of the following best explains why **equilibrium income will increase by more than \$100 in response to a \$100 increase in G**?

- a. Incomes will rise, resulting in a tax decrease.
- b. Incomes will rise, resulting in higher consumption.
- c. The increased spending raises the aggregate price level.
- d. The increased spending increases the money supply, lowering interest rates.
- e. The higher budget deficit reduces investment.

The multiplier ensures **more C** with each round.

38. (56%) **Unexpected increases in inventories** usually precede

- a. increases in inflation
- b. increases in imports
- c. stagflation
- d. decreases in production

Ig is more than desired, so lay-offs, decreasing production.

39. (63%) The **economy on the right is** currently **experiencing**

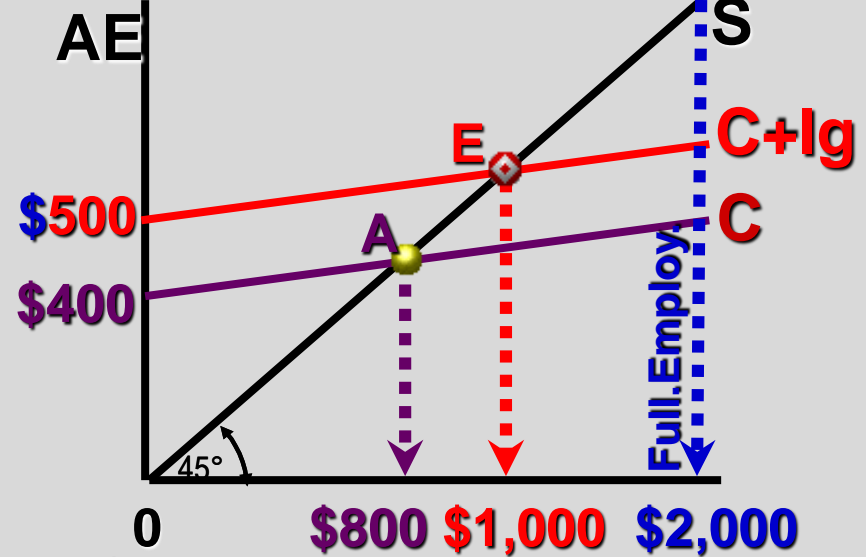
- a. inflation
- b. recession
- c. expansion
- d. stagflation
- e. rapid growth

40. (77%) Correct **monetary policy** to **reach FE GDP** is to **increase**

- a. the MS
- b. the RR
- c. discount rate
- d. taxes
- e. exports

41. (36%) The **minimum increase in government spending** to **reach full employment** is

- a. \$2,000
- b. \$1,000
- c. \$500
- d. \$200
- e. \$100



Determine what the “M” is going from A to E; then $M \times ? = \$1,000$

42. (58%) In the **simple Keynesian AE model [not AD/AS]** of an economy, **changes in Ig or G** will **lead to a change in which** of the following?

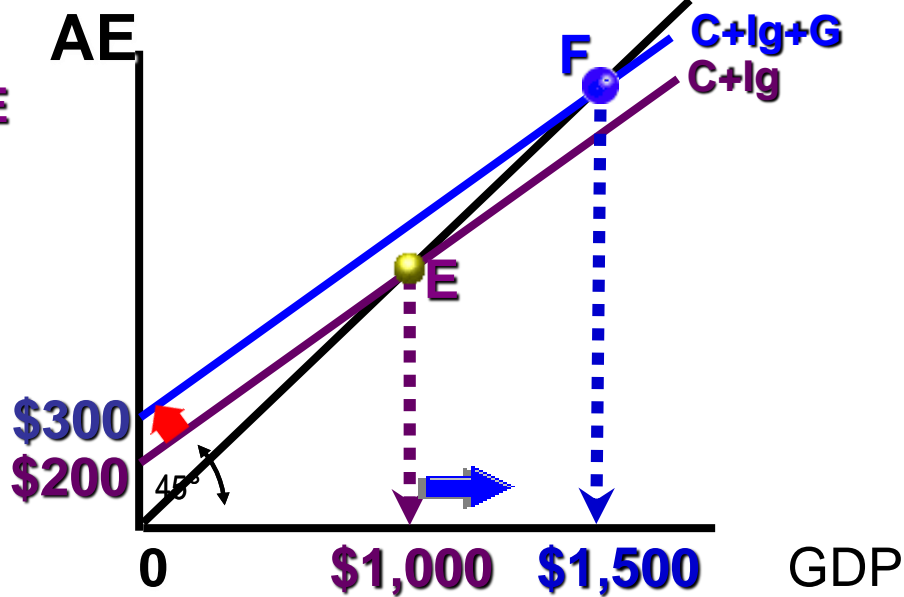
- a. the price level
- b. the level of output and employment
- c. interest rates
- d. the AS curve

43. (83%) In a **closed-private** in which the **APC is .75**, which of following is **true**?

- a. If income is \$100, then saving is \$75.
- b. If income is \$100, then “C” is \$50
- c. If income is \$200, then saving is \$50
- d. If income is \$200, then “C” is \$75
- e. If income is \$500, then saving is \$100

58. (61%) The graph indicates **equilibrium at E** for a **closed economy** without G. If the **addition of G results in equilibrium at F**, which of the following is true?

- a. G is \$300 and the multiplier is 5.
- b. G is \$100 and the multiplier is 5.
- c. G is \$100 and consumption increased by \$500.
- d. G and Ig increase by \$500.
- e. Consumption and GDP increase by \$500 each.



59. (84%) According to **Keynesian theory**, **decreasing taxes and increasing G** will most likely **change consumption** and **unemployment** in which of the following ways?

Consumption

Unemployment

- | | |
|--------------------|-----------------|
| a. Decrease | No change |
| b. Decrease | No change |
| c. <u>Increase</u> | <u>Decrease</u> |
| d. Increase | Increase |
| e. No change | Decrease |

60. (79%) In an **economy at full employment**, a presidential candidate proposes cutting the government debt in half in 4 years by **increase T and reducing G**. According to **Keynesian theory**, implementation of these policies is most likely to **increase**

- | | |
|------------------------|--------------------------------|
| a. <u>unemployment</u> | d. aggregate supply |
| b. consumer prices | e. the rate of economic growth |
| c. aggregate demand | |