

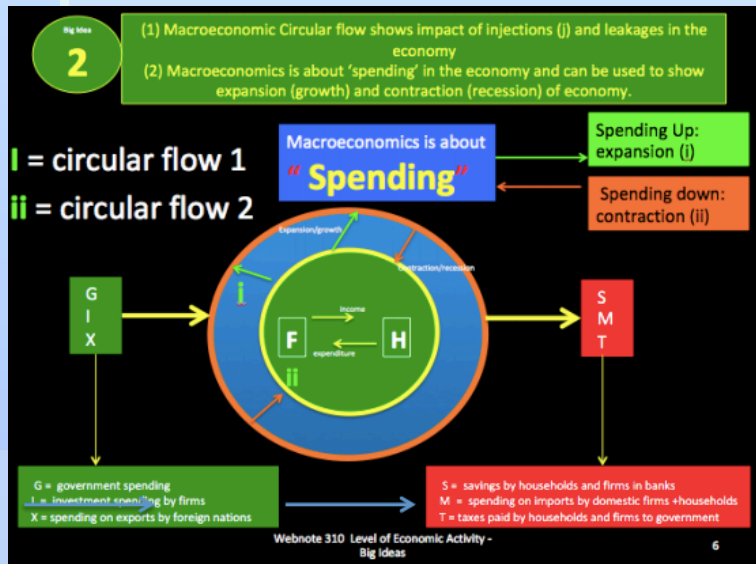
## **section 2.2 AS +AD**

### **Webnote 227**

**Using AS + AD to understand the management of a macroeconomy**

# Macro Views

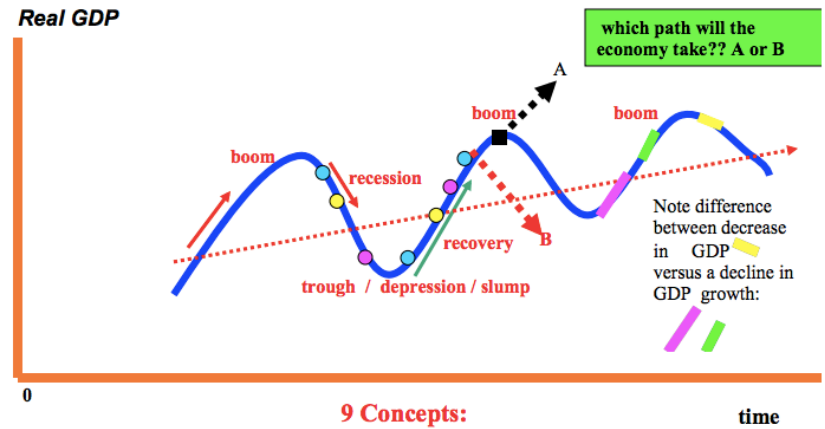
## Macro circular flow of income



## Macro business cycle

**Economic Cycle<sup>1</sup>: How the macroeconomy performs over time<sup>2</sup>**

### Business Cycle 1

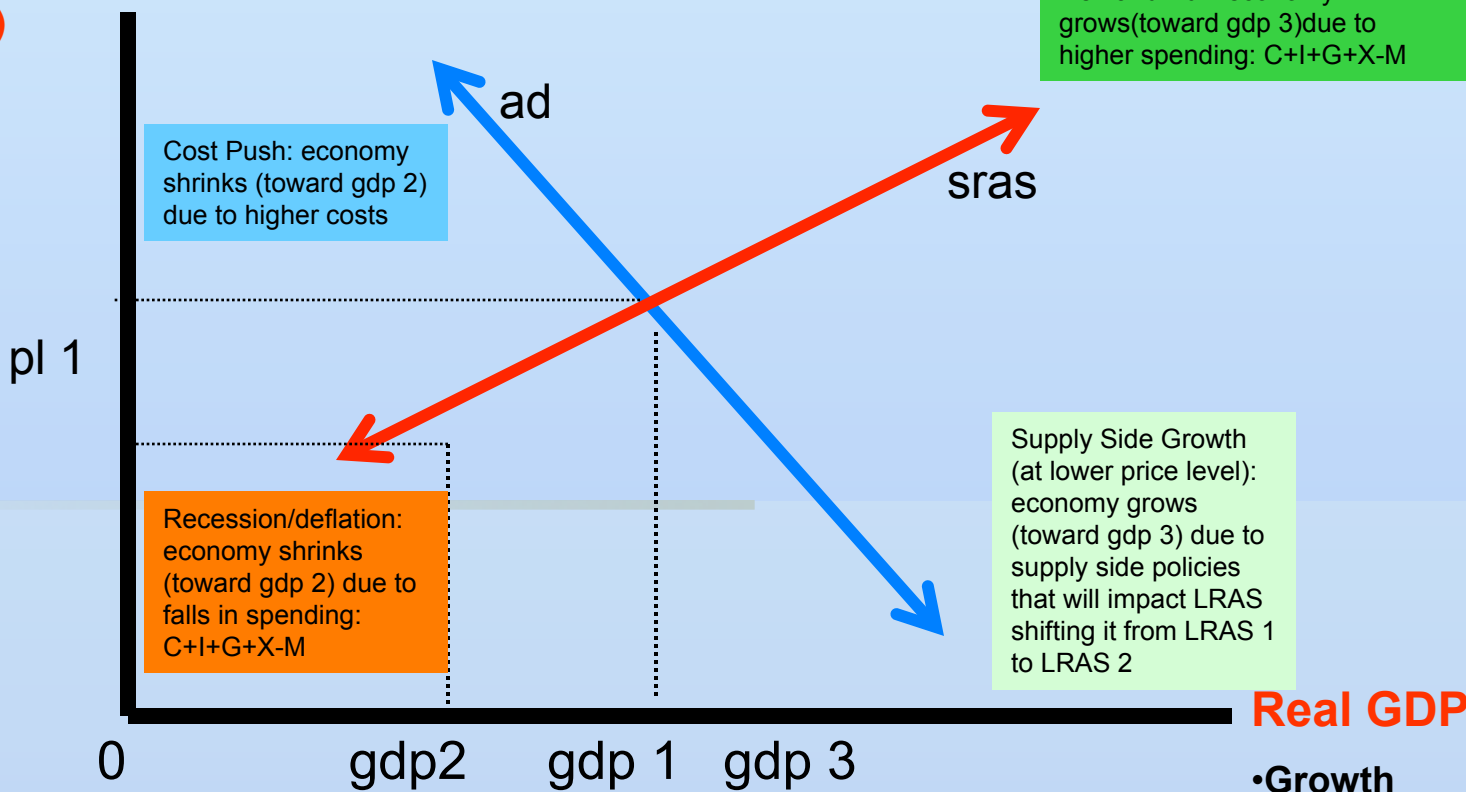


# What can happen in the macro economy? 4 alternatives.

see webnote 328 (recessionary gap)

Read Blink  
pp 193-194

Price Level (inflation/deflation/  
disinflation)



Real GDP

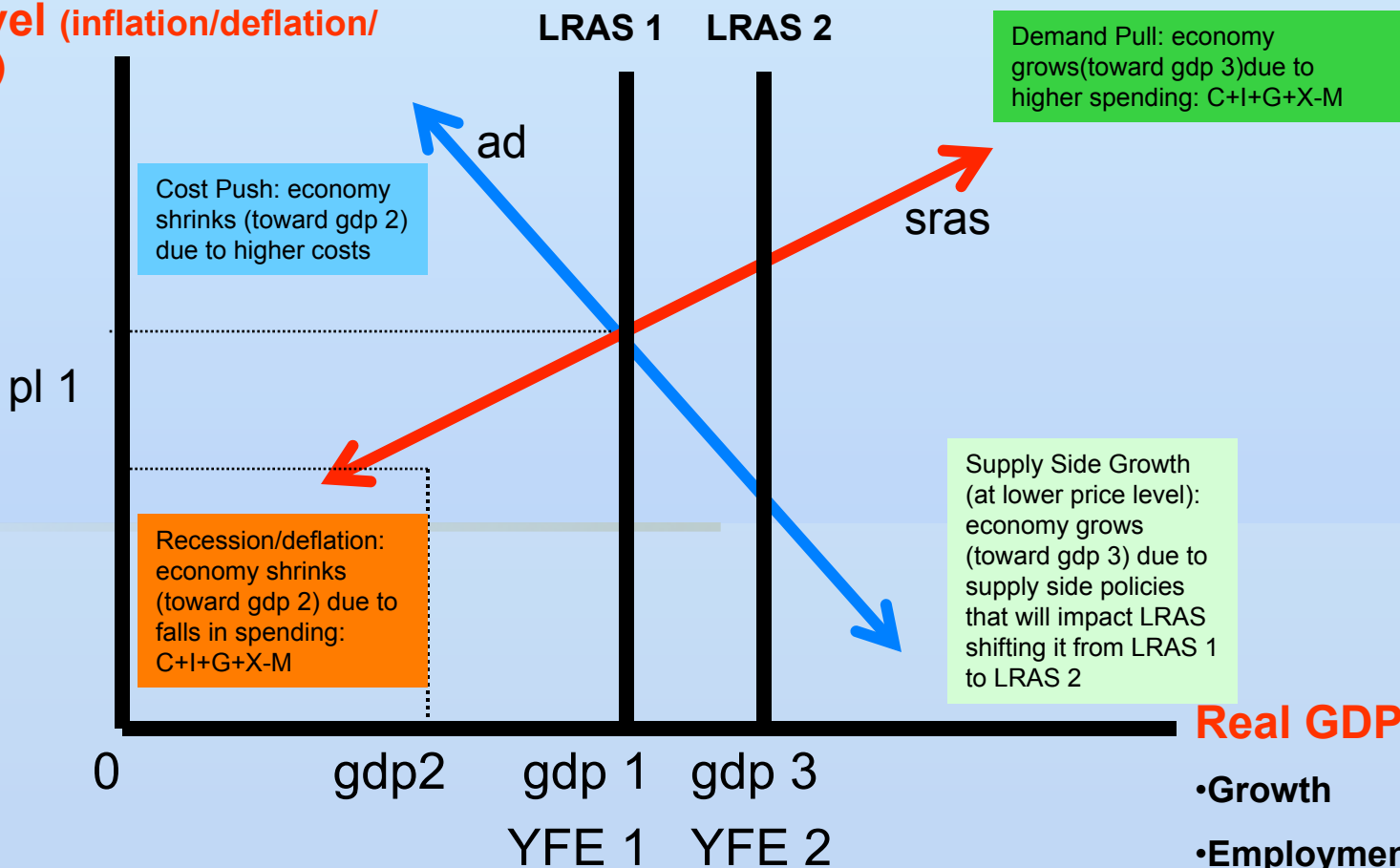
- Growth
- Employment
- National Income

# What can happen in the macro economy? 4 alternatives.

see webnote 328 (recessionary gap)

Read Blink  
pp 193-194

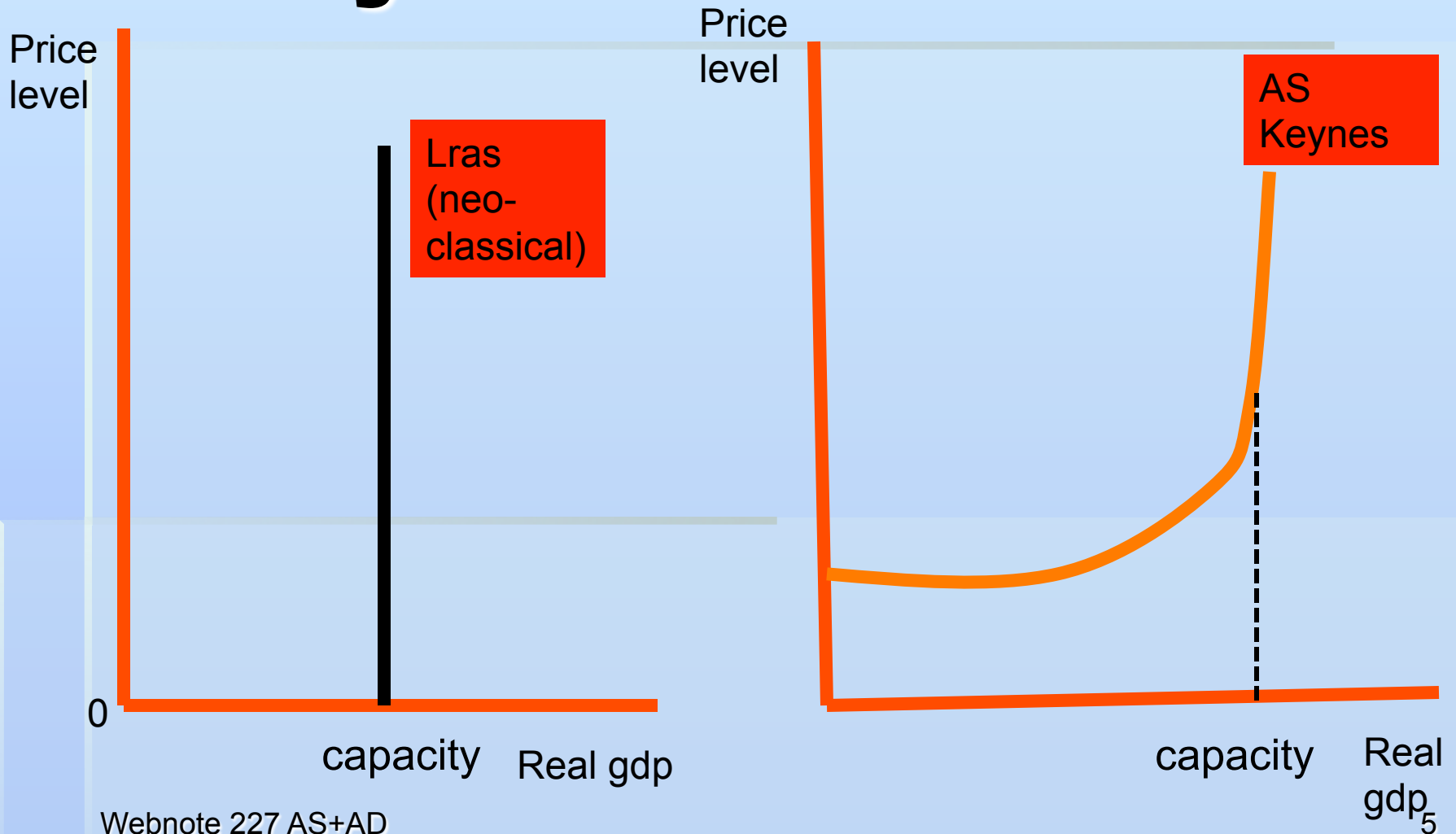
Price Level (inflation/deflation/  
disinflation)



Real GDP

- Growth
- Employment
- National Income

# Lras (neo-classical) + AS Keynesian

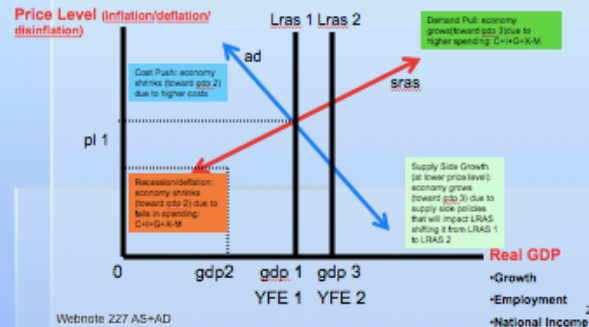


# What cause a shift in AS?

## What can happen in the macro economy? 4 alternatives.

see webnote 328 (recessionary gap)

Read Blink  
pp 193-194



**SRAS**

**LRAS**

1. **WAGE RATES:** rise or fall
2. **RAW MATERIALS:** costs of inputs rise or fall (e.g. oil)
3. **IMPORTS-** rising import prices cause sras to shift from sras 1 to sras 2.
4. **TAXES+SUBSIDIES:** both affect ability of firms to produce

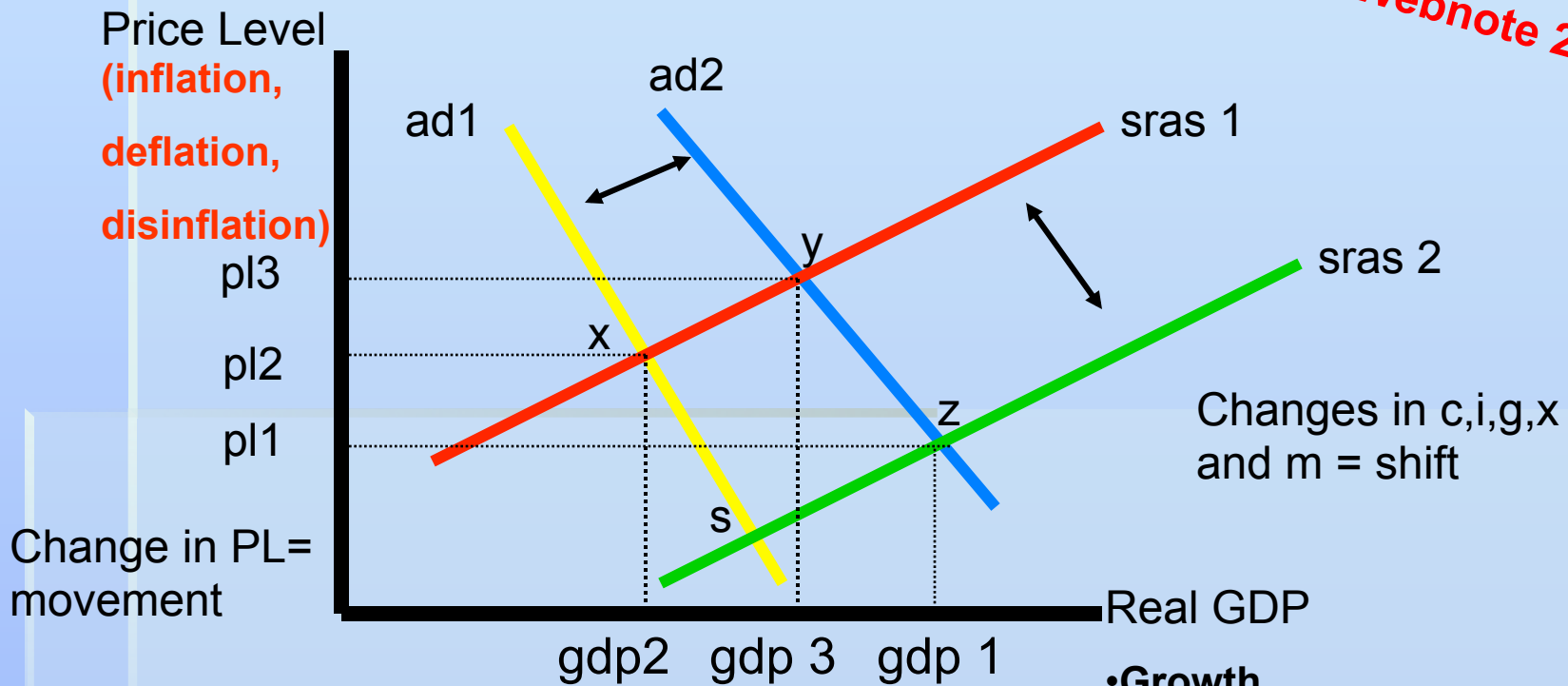
1. Changes in Q + Q of capital investment
2. Changes in Q + Q of labour

Supply side policies - see webnote 261 to understand how to shift LRAS

# Diagram A: Aggregate Demand / Aggregate Supply Model in the Short Run

## ■ AS-AD to Manage economic objectives

*See Webnote 221*



Webnote 227 AS+AD

- Growth
- Employment
- National Income

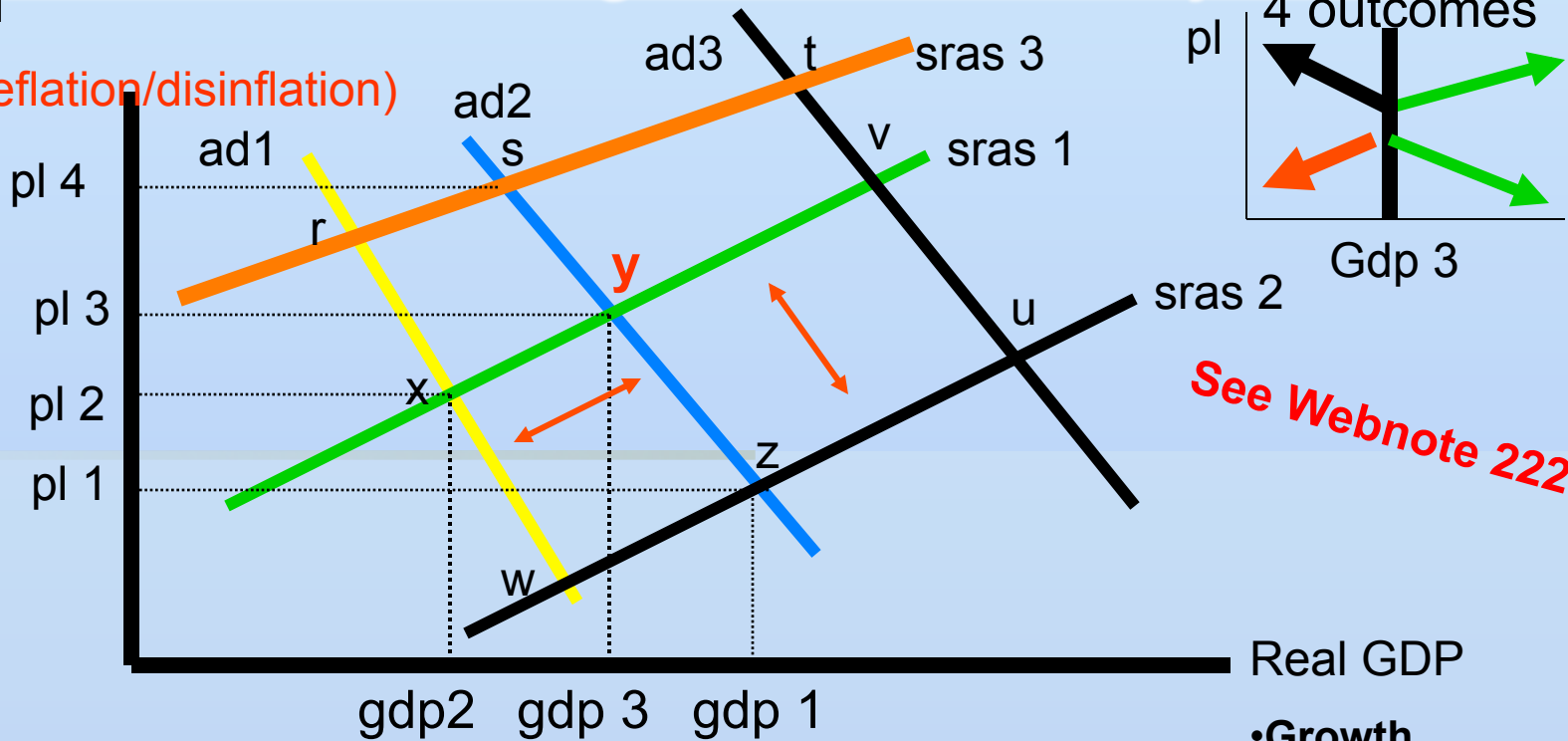
# Diagram B: Aggregate Demand / Aggregate Supply Model in the Short Run

See webnote

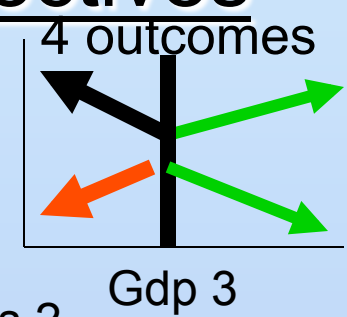
## AS-AD to Manage economic objectives

Price Level

(inflation/deflation/disinflation)



See Webnote 222



Webnote 227 AS+AD

Real GDP

- Growth
- Employment 8
- National Income



# What causes a movement in AD?

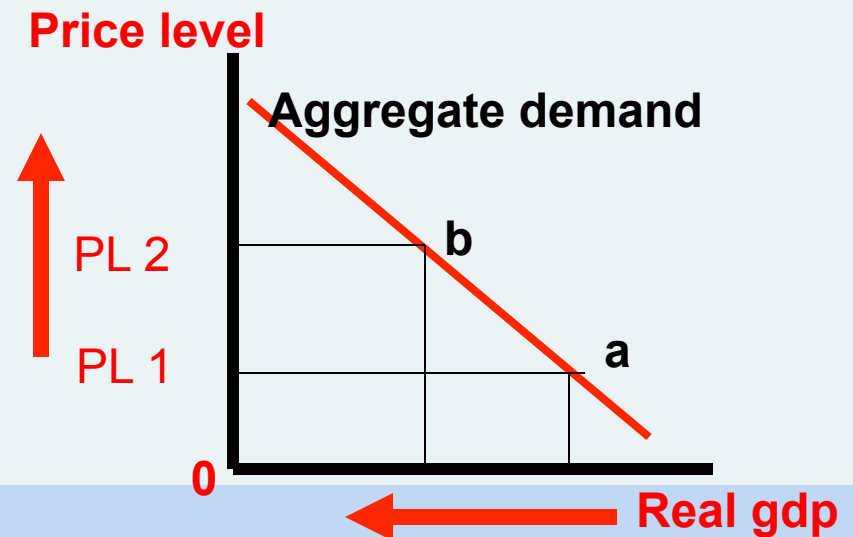
$$\mathbf{Ad}_{\text{(expenditure)}} = \mathbf{c} + \mathbf{i} + \mathbf{g} + \mathbf{(x-m)}$$

- AD downward sloping as like the micro demand curve (see intro webnote 110)
- AD inversely related to PL:

price level ↑

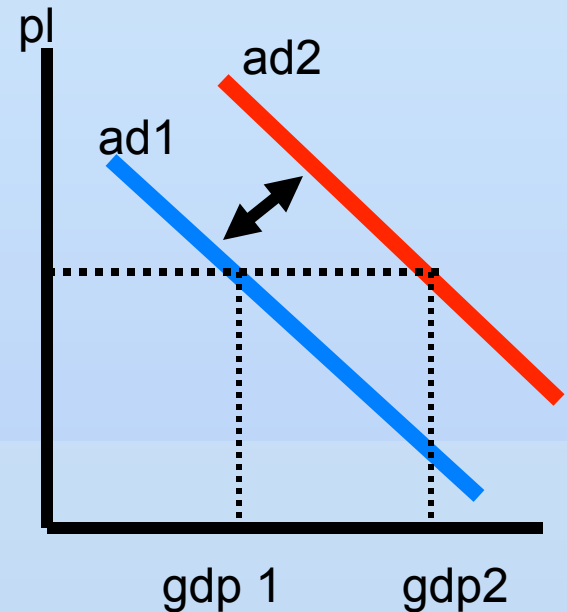
gdp ↓

Why does ad slope downwards?  
See slide 16



# What causes a Shift in AD?

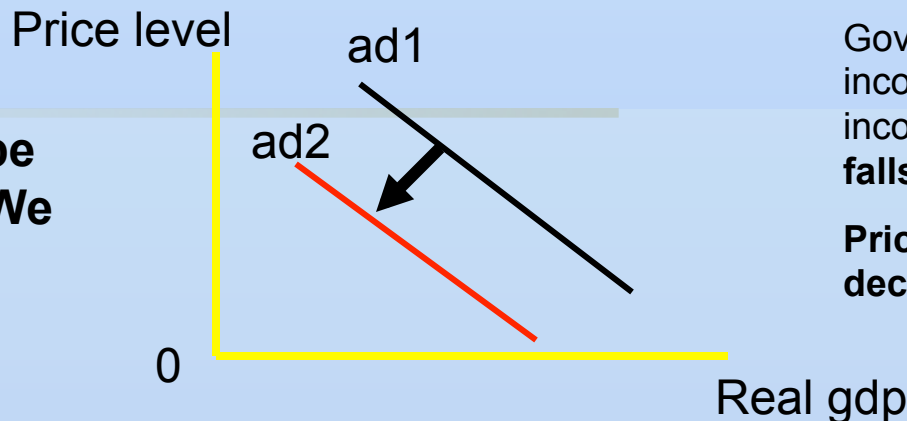
1. Fiscal policy - e.g. + or - in direct taxes
2. Monetary policy - + or - in interest rates
3. Foreign income changes
4. Expectations [www.ifo.de](http://www.ifo.de) LL
5. External (outside economy) shocks - oil



# What causes a Shift in AD? **example**

- Fiscal policy: example of how it affects AD
- Government intends to leak the economy because of a fear of inflationary pressure

How will economy be affected? We can only fully see when we insert AS.



Government raises direct taxes on income to reduce disposable income. Spending by consumers © falls: AD 1 → AD2

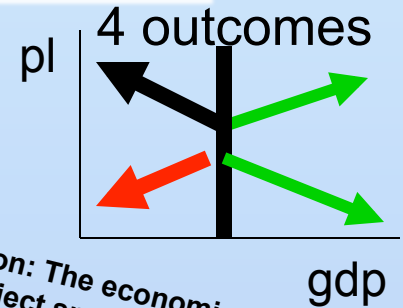
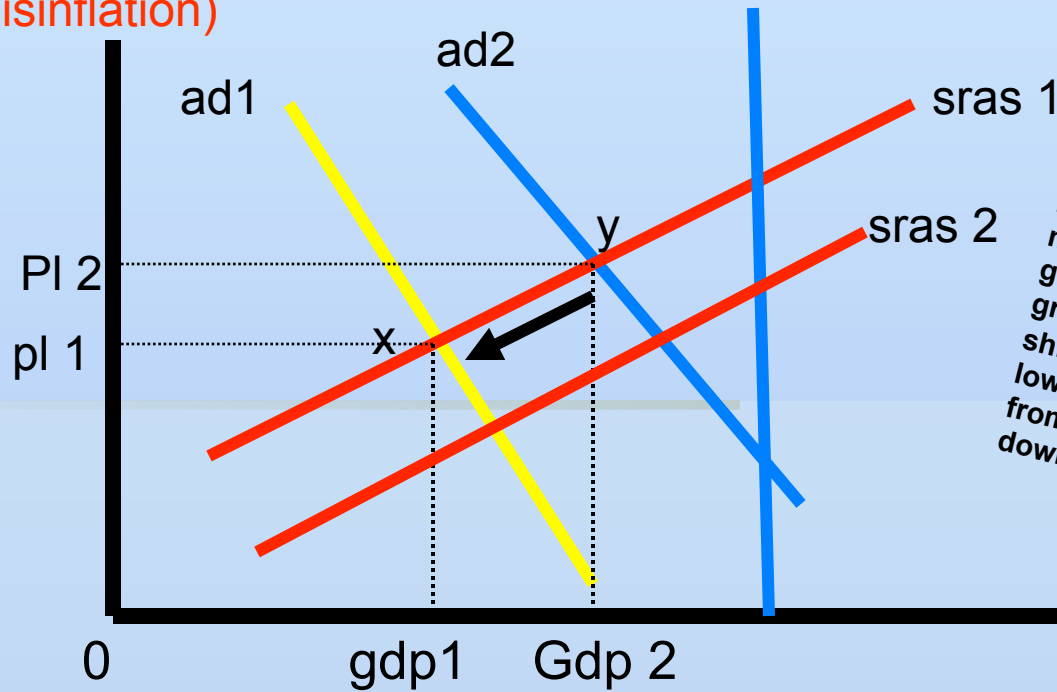
Price level falls and gdp declines!

# What causes a Shift in AD? **example**

Recession (2 consecutive quarters of declining growth). Economy shifts from Y to X and spending falls so that national income changes from gdp 2 to gdp 1. C + I fall creating unemployment / slack in the economy and price level adjust to pl1.

## ■ AS-AD to Manage economic objectives

Price Level (inflation/  
deflation/disinflation)




*Solution: The economic objective here is to inject spending into the macroeconomy and sometimes government may need to intervene to grow the economy (Keynesian) shifting AD back to ad 2 or allow the lower wage rates that might result from the recession to shift SRAS downwards to SRAS 2.*

Real GDP

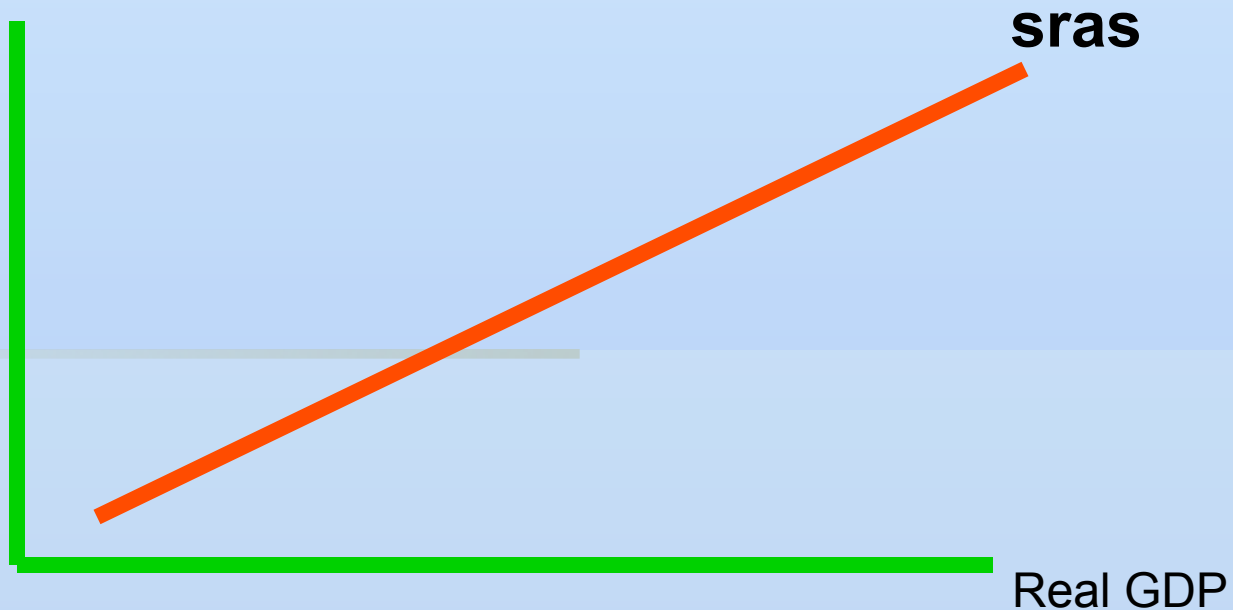
- Growth
- Employment<sub>12</sub>
- National Income

# Points to note about AD

1. AD downward sloping as the micro demand curve ( refer to real balance, interest rate and net export effects see last slide on this presentation)
2. AD inversely related to PL + shows the PLANNED level of spending at different price levels by H, F, G and Trade sector.
3. AD represents spending of consumers (H), investors (I), government (G), and foreigners (X-M).
4. Govt. policy should therefore attempt to control AD to ensure equilibrium in the economy i.e. growth + stable prices.
5. What influences Consumption?
6. **Live Link** see **UTUBE 2.2 clip 5 Consumption and AD 8/10**   
**What influences Investment? See web 313 (syllabus 2.5) for 4 influences on Investment (I)**

# AS (aggregate supply)

Price Level (inflation/  
deflation/disinflation)



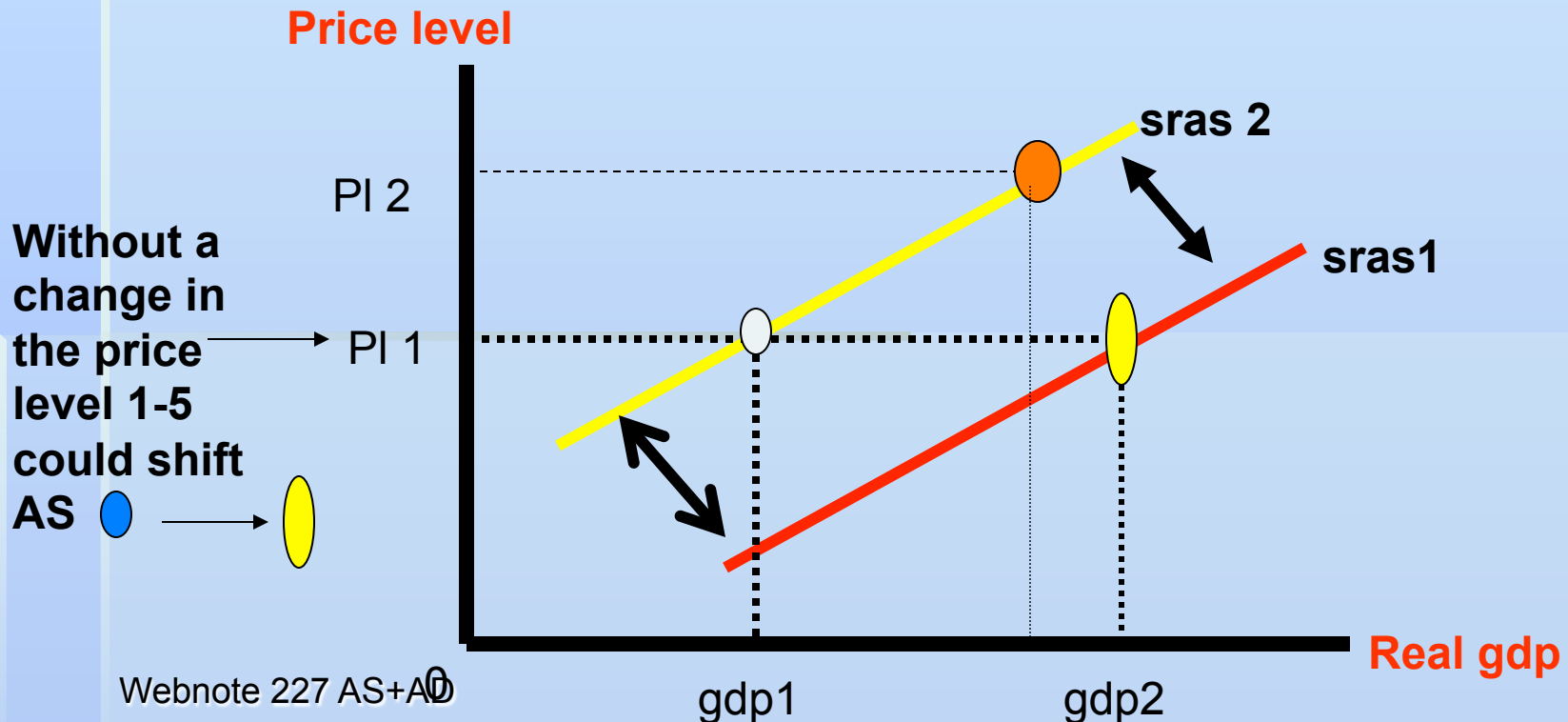
# Aggregate supply (**AS**) of final goods or labour in a whole economy

- Represents total output in an economy
- **OR**
- Total supply of labour in the macroeconomy.
- Therefore it can be used to show a ‘**final goods**’ view or a ‘**labour**’ view of the economy

# What causes **AS** to shift ?

1. Changes in Q + Q of capital investment
2. Changes in Q + Q of labour

**Supply side policies - see webnote 261 shows how government policies can cause output to change**



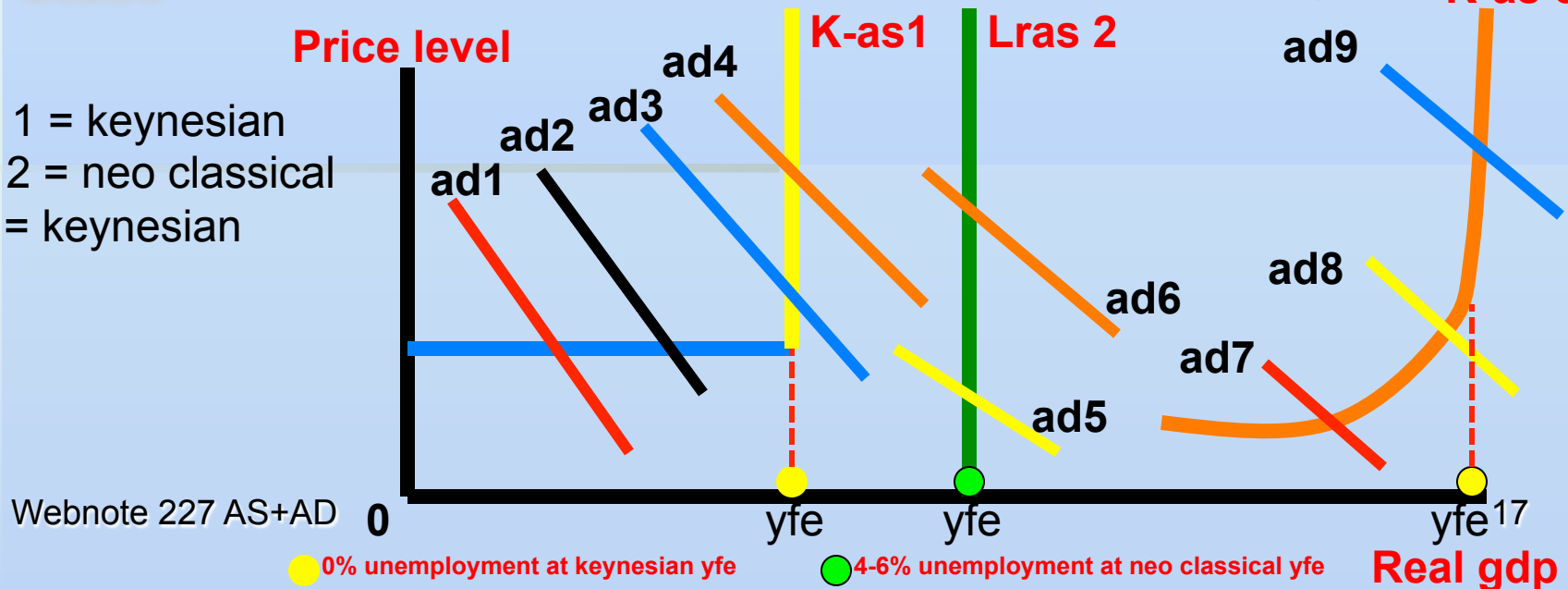


# Key Points about LRAS

- Features:
- Shape of LRAS curve is disputed see **Keynes** vs **Monetarists** (neo classical school, or supply siders)
- The key issue amongst economists is the shape of the AS. To what extent does it take a vertical shape ? It is this vertical trend which leads to inflationary pressure
- Alternative interpretations exist as to the shape
- The key issue is at which point the economy is currently operating
- Some sources draw the Keynesian LRAS at a point below  $y_f$  indicated below ● See Cambridge/Tragakes book p 246. The only conclusion to draw from this is that unemployment rate at this point ● is zero or 0% whereby all resources in the economy are used. The neo classical economists on the other hand see that at  $y_f$  ● the economy is at full employment with an unemployment rate of 4-6%. This is what the monetarists described as the natural rate of unemployment. Keynesian theory does not account for a 'natural' unemployment rate and therefore the conclusion is that the rate of unemployment at the full employment level = 0%. Both of these alternatives are referred to as full employment.

**utube** : see UTUBE 2.2 "Keynesian vs Monetarist on the LRAS" . Rating: 6/10 **K-as 3**

K-as 1 = keynesian  
Lras 2 = neo classical  
as 3 = keynesian



# Points about LRAS

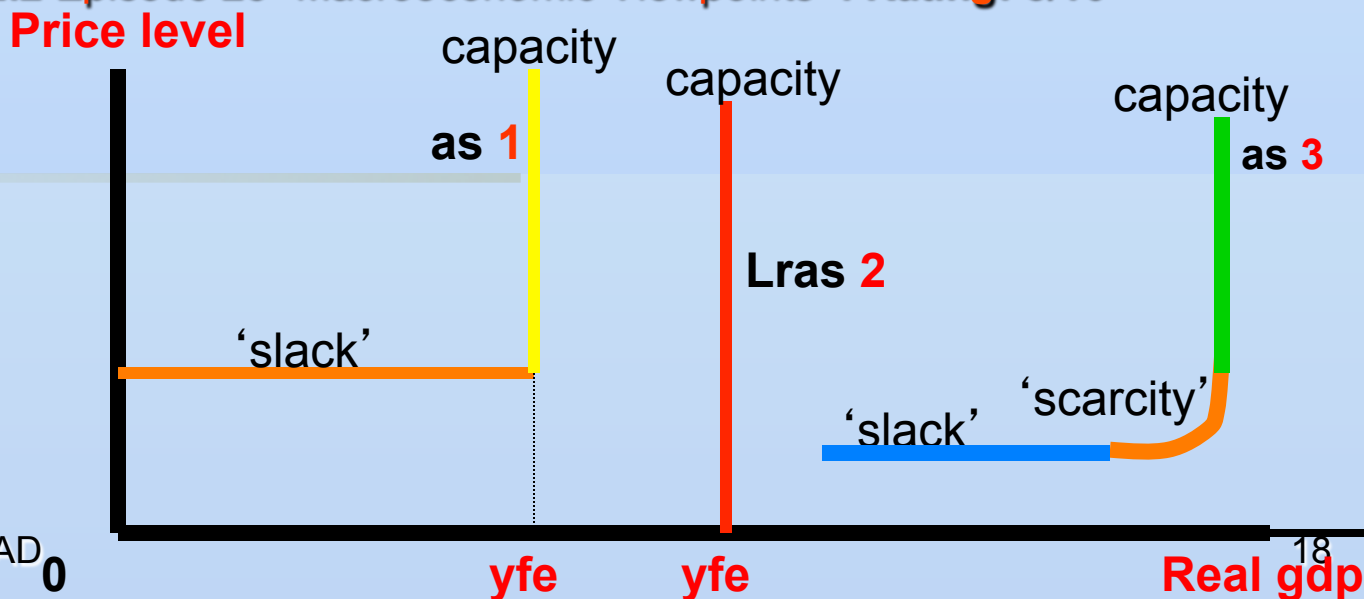
## Features:

- Shape of (LR)AS curve is **disputed** see Keynes vs Monetarists
- The key issue amongst economists is the shape of the **AS in the long run**. To what extent does it take a vertical shape ? It is this vertical trend which leads to inflationary pressure
- Alternative interpretations exist as to the shape: **you must know these!**
- The key issue is at which point the economy is currently operating. See gdp Y on slide 3

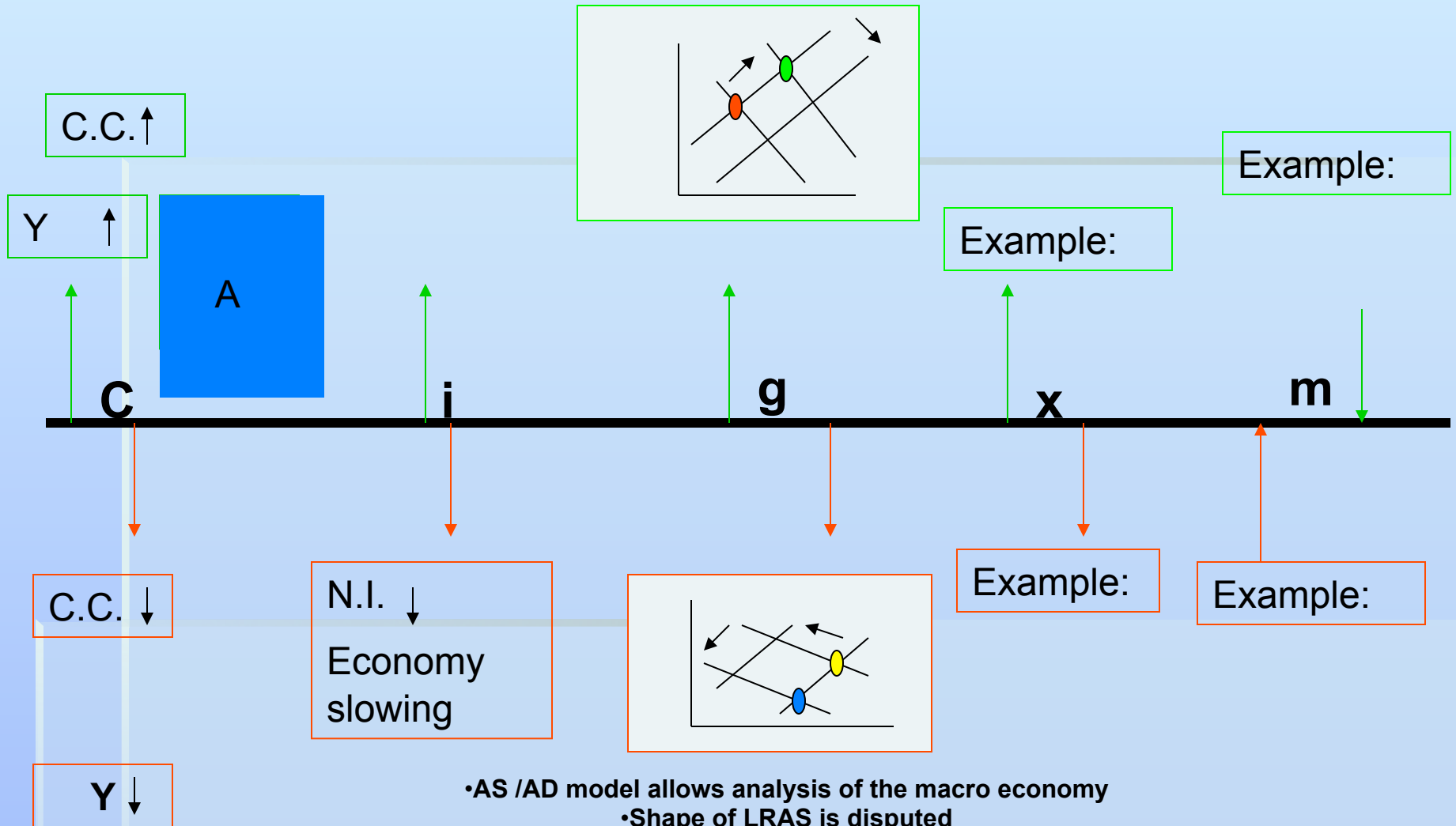
utube

see UTUBE 2.2 Episode 25 "Macroeconomic Viewpoints" . Rating: 8/10

Note: When drawing Keynesian AS use AS 3 version with 3 segments with 'slack', 'scarcity' and 'capacity'



# How to manage an economy?



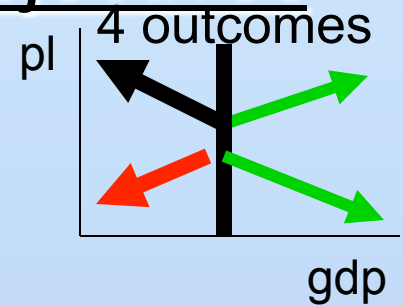
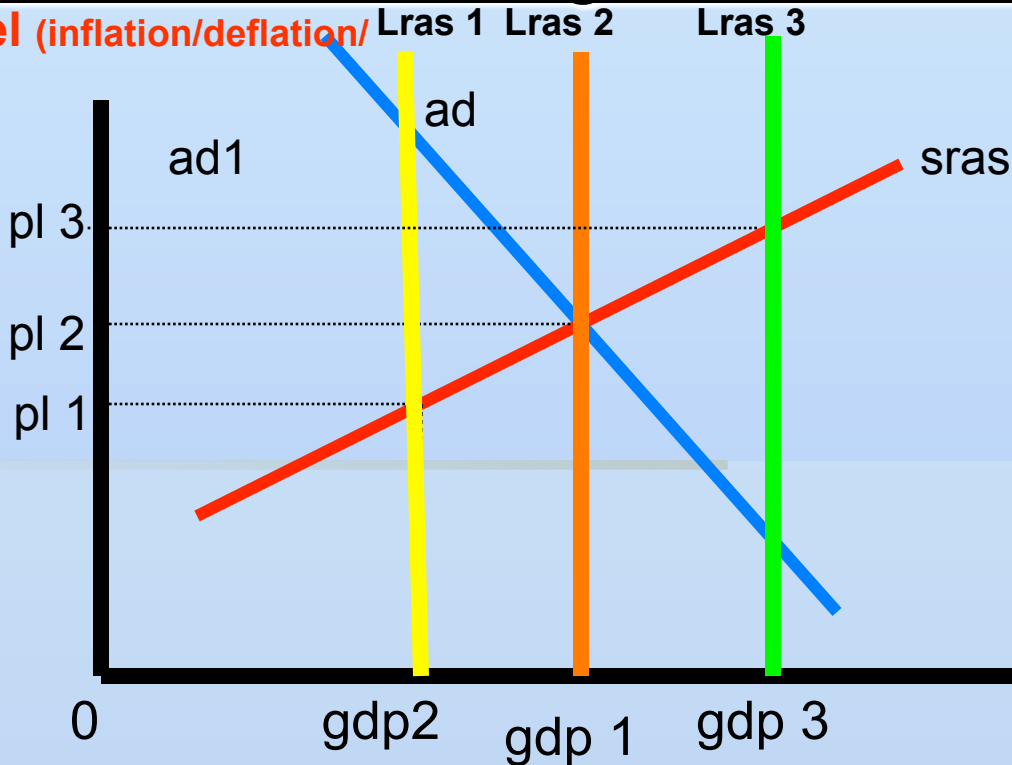
- AS /AD model allows analysis of the macro economy
- Shape of LRAS is disputed
- Behavioural factors represented in by statistical indices such as a business confidence index plays a vital role in any economy and model expectations can often be unfulfilled

# In (de) flationary Gap

see webnote 328 (recessionary gap)

## AS-AD to Manage economic objectives

Price Level (inflation/deflation/  
disinflation)



Read Blink  
pp 193-194

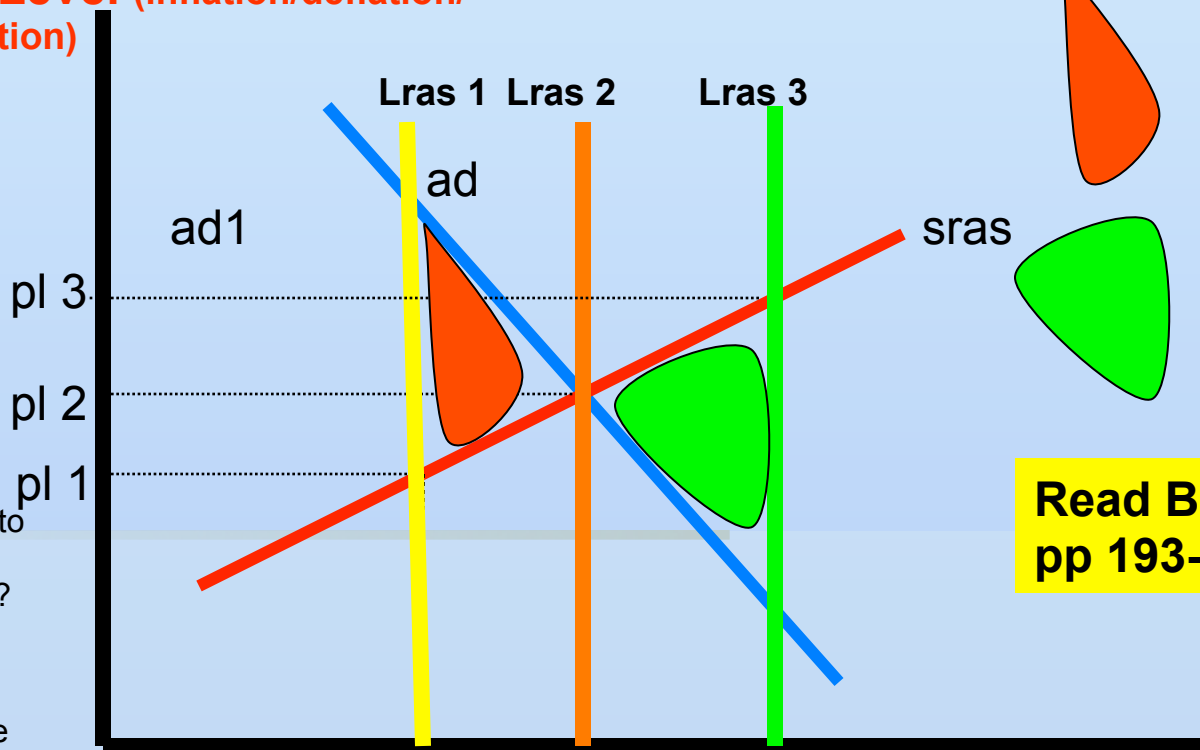
Real GDP

- Growth
- Employment
- National Income

# In (de) flationary Gap

see webnote 328 (recessionary gap)

Price Level (inflation/deflation/  
disinflation)



Inflationary gap (from Lras 1)

Deflationary gap (from Lras 3)

Read Blink  
pp 193-194

Real GDP

- Growth
- Employment
- National Income

Note: **yfe** changes according to the shifts in the LRAS

What allows **gdp 1** to occur when full employment = **yfe2**?

Ans: Natural rate where labour is available to produce over the capacity level. In this case the capacity is **YFE 2**

# In (de) flationary Gap

see webnote 328

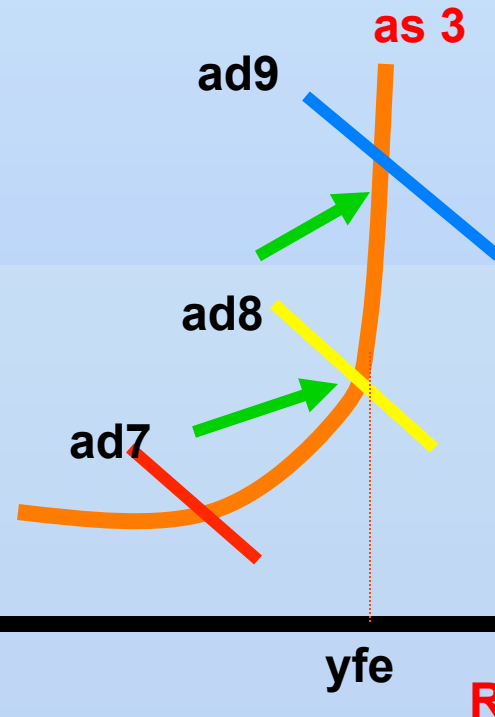
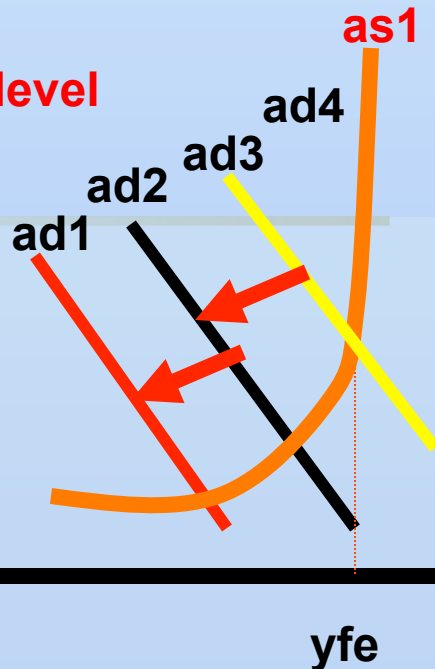
- Keynesian concept

utube

deflationary pressure  
"Bust"

inflationary pressure  
"Boom"

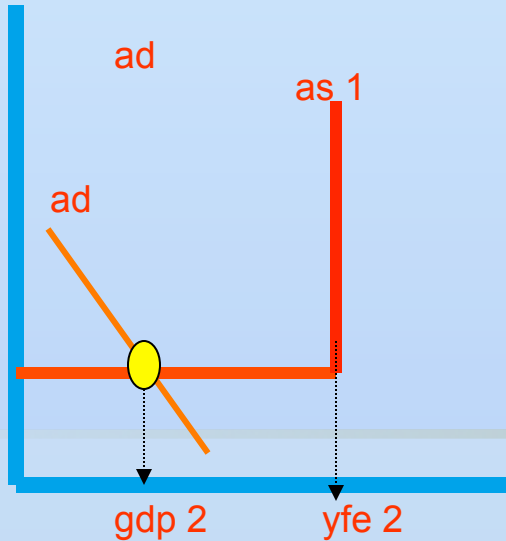
Price level



# In (de) flationary Gap

## ■ Keynes

- “markets unstable in LR”



See  
webnote

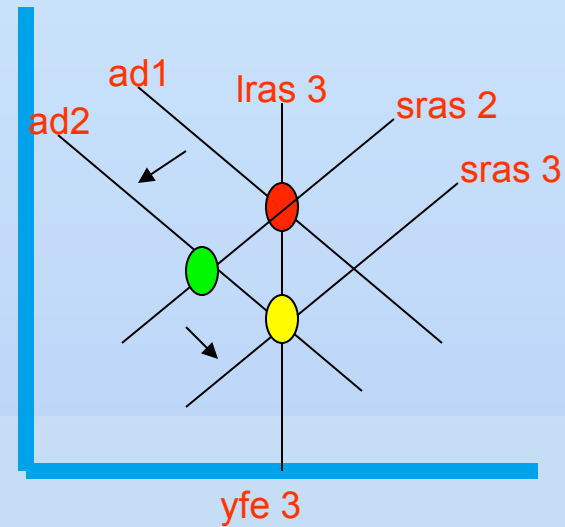
**306**

Keynes believed the economy could be at a non yfe equilibrium for long periods of time i.e. gdp2 and would not adjust to capacity without government intervention

webnote 220 Big  
Ideas

## Friedman

- “market stable” in LR



Friedman believed that the economy was largely self adjusting and would return automatically to yfe 3

# Short run vs long run

1. Macroeconomic **Short Run**: prices of final goods change but not factor prices. There is a time lag. ( time lag is a delay period of time between an action and a response)
2. Macroeconomic **Long Run**: prices of goods include the changes to factor prices i.e. costs of factors of production increase

**Do firms want ZERO inflation?** No, not really!  
Firms like stable (1-2%) inflation as they see total revenues rising but workers are not asking for higher wages in the short run i.e. factor costs not rising in short run. This gives firms the opportunity to raise prices ( sometimes above the cost increases and therefore raise revenues in turn raising profits)



# exam focus

- SL paper 1 2010-May
- 2a Aggregate demand consists of consumption, investment, government spending and net exports (exports – imports). Explain two factors that may influence investment and two factors that may influence net exports.
- 2b Evaluate the effectiveness of and increase in investment expenditure on the performance of an economy.
- 15/25

# Bib to read:

- Blink chapters 14 +15
- Triple A + Tutor2U+ BIZED
- A.G.Anderton 108-115
- Economic Review: Akos Valentinyi, "Monetary policy and interest rates", 20(4), April 2003
- Economic Review: Peter Smith, "Growth and the government", Question and Answer 19(3), February 2002

HL

# HL Keynesian Multiplier- see syllabus item 91

see webnotes 314 and 323

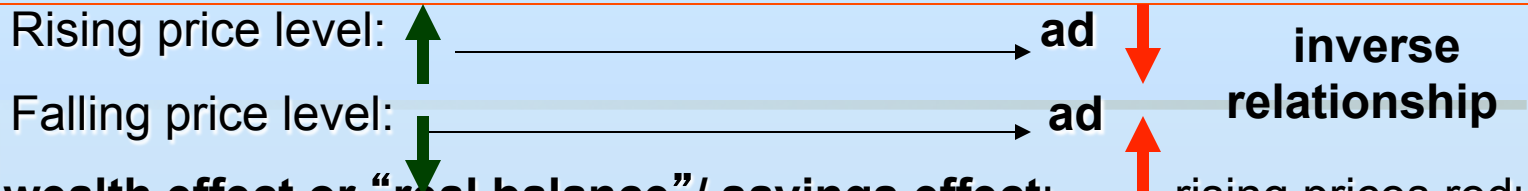
see webnote 703 for examples

$$\frac{1}{1 - MPC} = \frac{1}{MPS + MPT + MPM}$$

1. Keynesian multiplier justified G spending
2.  $mpc > 1$
3. 100 m injection (J) would result in a  $> 100$  m increase in N.I.

# Why is AD negatively sloped? (movement along ad see syllabus item 82)

**note: 1 to 3 below are for a rising price level i.e. inflation. What is movement effect of a changing price level. This movement is explained by 1-3 below.**



1. **wealth effect or “real balance”/ savings effect:** rising prices reduces the real value of bank deposits. When people feel poorer then they tend to spend less i.e. AD falls as PL rises. Rising prices tends to make people feel poorer. Then AD falls.

Note: when prices rise the value of bank balances fall

2. **“net export” effect (X-M):**  
rising price level in the domestic economy makes exports more expensive and imports more attractive i.e. AD falls as PL rises because of foreign trade sector: X-M

3. **“interest rate” effect:**  
if price level rises interest rates for borrowing from banks may be likely to rise over time as government intervene to reduce spending. Interest rates rise and therefore money will become more expensive causing spending ( C+I ) to fall over time i.e. AD falls as PL rises.

Note: Business and Consumer Confidence is also a factor to consider. Confidence rises then spending rises. Confidence falls then spending falls.