See webnotes:
235
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2.3 Big Ideas

- Unemployment
- Inflation
- Growth
- Distribution

Read the syllabus items to understand the IB focus for this economic theory !

Big Idea 1 | Big Idea 2 | Big Idea 3 | Big Idea 4 | Big Idea 5 | Big Idea 6

Big Idea

1

There are 4 main types of unemployment

Types of unemployment and what problems?

1. Frictional
2. Structural
3. Seasonal

Know your vocabulary here: e.g.

- Underemployment
- Hidden employment
- Demand deficient unemployment
- Equilibrium + disequilibrium unemployment

Note: "natural unemployment" = 1+2+3 are components of **'equilibrium unemployment'**

4.**Cyclical (demand deficient)– key focus. NB this is an example of 'disequilibrium unemployment'**

Evaluate policies to reduce cyclical unemployment?

Big Idea 2

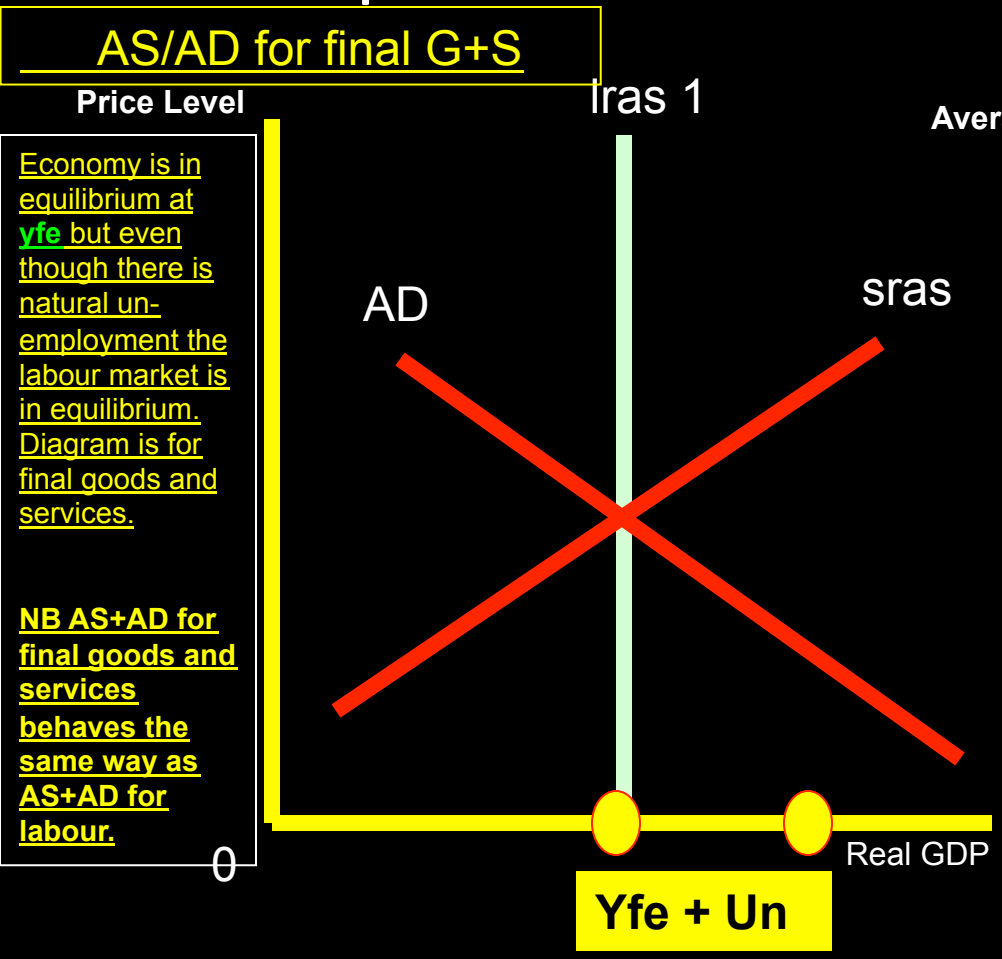
Know equilibrium versus disequilibrium unemployment (use AS/AD for Labour) and the concept of a cyclical downturn or cyclical unemployment

Webnote 230

Equilibrium and Disequilibrium Unemployment

Equilibrium or Disequilibrium

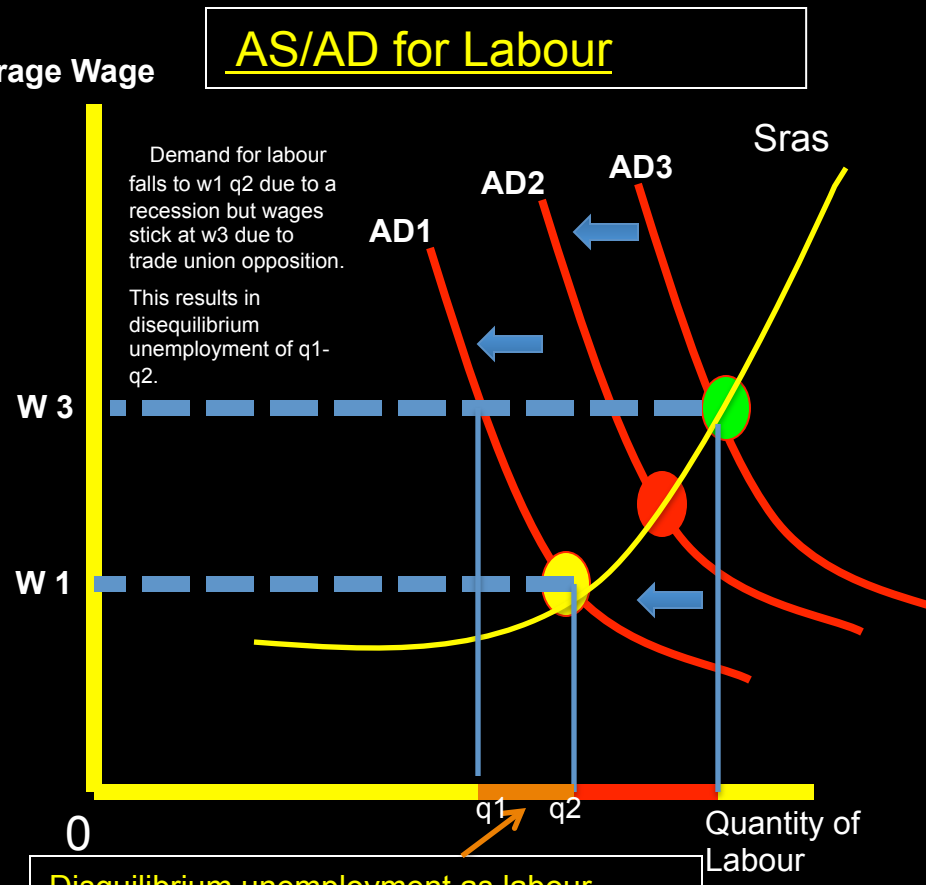
AS/AD for final G+S



Economy is in equilibrium at yfe but even though there is natural un-employment the labour market is in equilibrium. Diagram is for final goods and services.

NB AS+AD for final goods and services behaves the same way as AS+AD for labour.

AS/AD for Labour



Disquilibrium unemployment as labour market is not in equilibrium as wages do not fall to w1 due to trade unions.

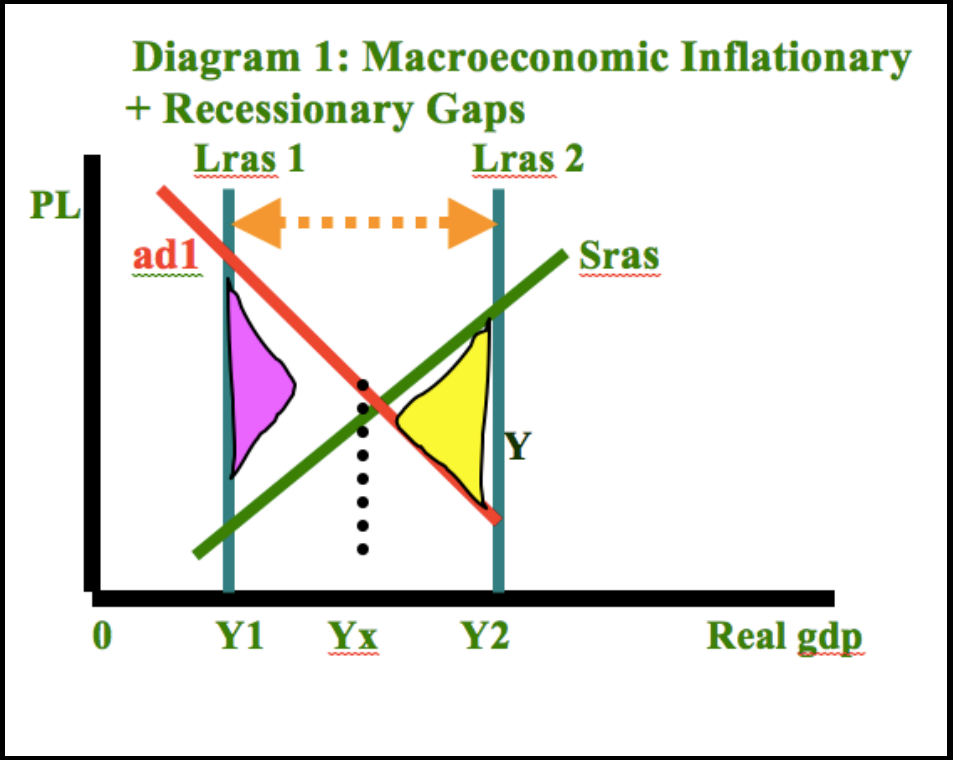
Big Idea

3

There are 2 diagrams to draw expansion and contraction in an economy. E.g. Demand deficiency in a macroeconomy (keynesian concept) is shown below in diamram 1

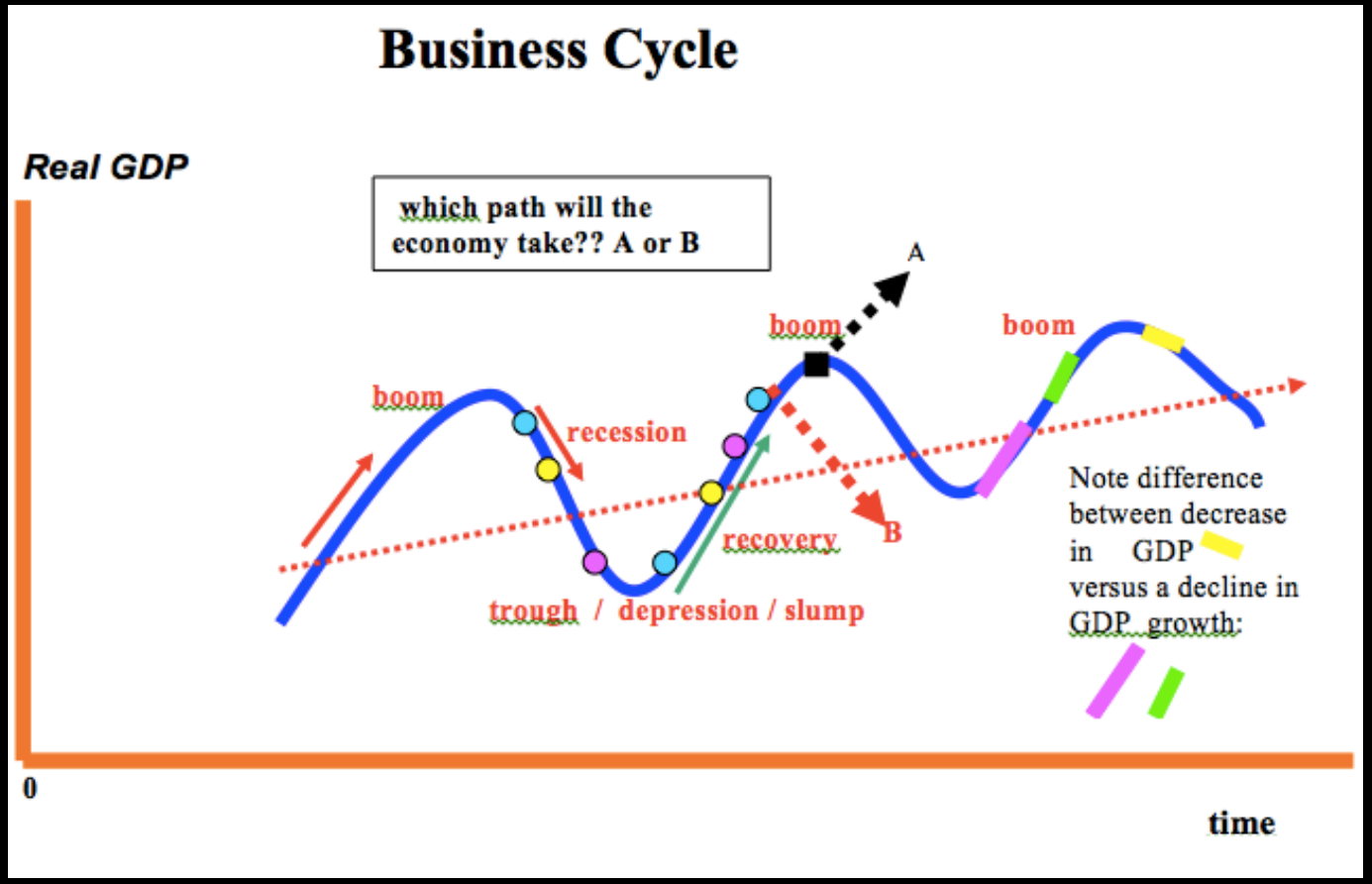
There are 2 diagrams to use to show 'gaps': inflationary and recessionary (defationary). The 'gaps' are shown using the monetarist LRAS (Diag 1) but they can also be shown using the keynesian LRAS. See Blink p 195 or webnote **220** item

Big Idea 5



Cyclical unemployment

Business cycle is a useful diagram to show cyclical downtuns over time

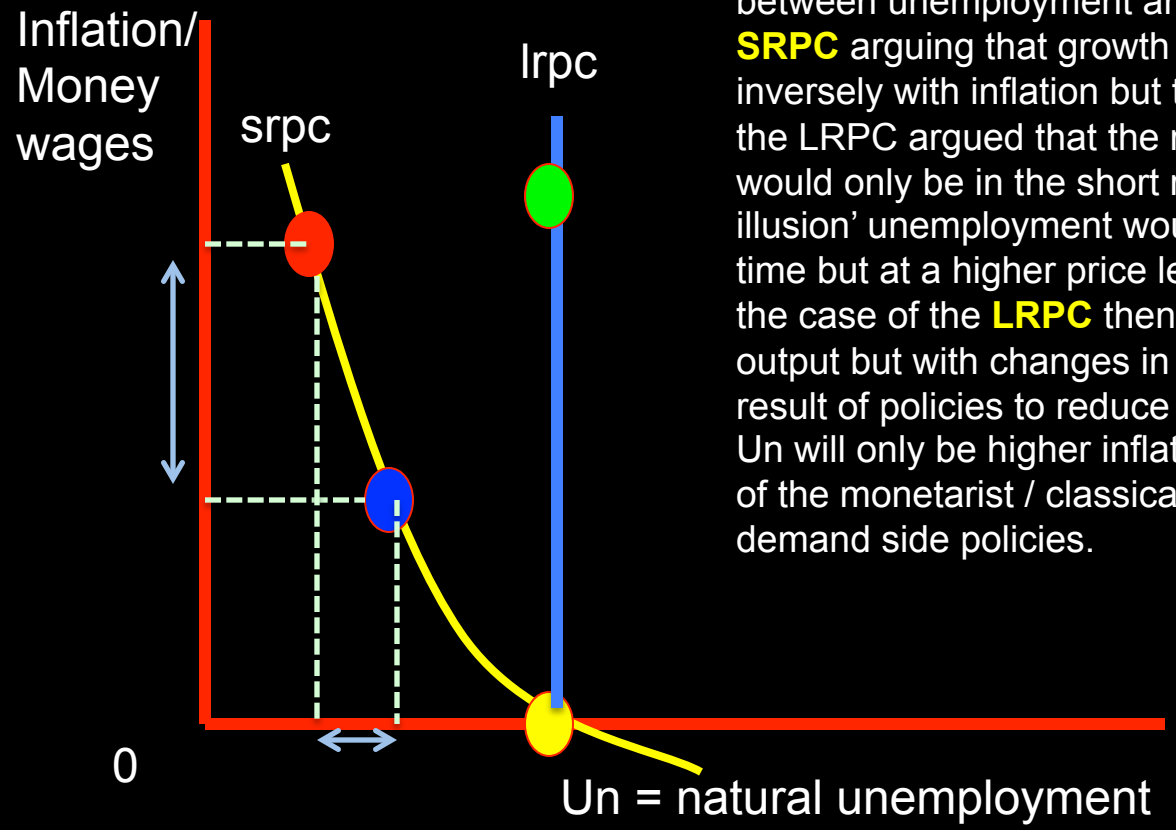


Big Idea 4

The short and long run Philips curves show the relationship between inflation (money wages) and unemployment.

Diagram A: Short/Long Run Philips Curve

- Philips Curve



Keynesians believed in the 'trade off' ( ) between unemployment and inflation seen in the **SRPC** arguing that growth could be managed inversely with inflation but the monetarist view in the LRPC argued that the move from blue to red would only be in the short run and due to 'money illusion' unemployment would revert to yellow over time but at a higher price level – see green dot. In the case of the **LRPC** then there is no impact on output but with changes in the price level. The result of policies to reduce unemployment below Un will only be higher inflation. This then is the core of the monetarist / classical argument against demand side policies.

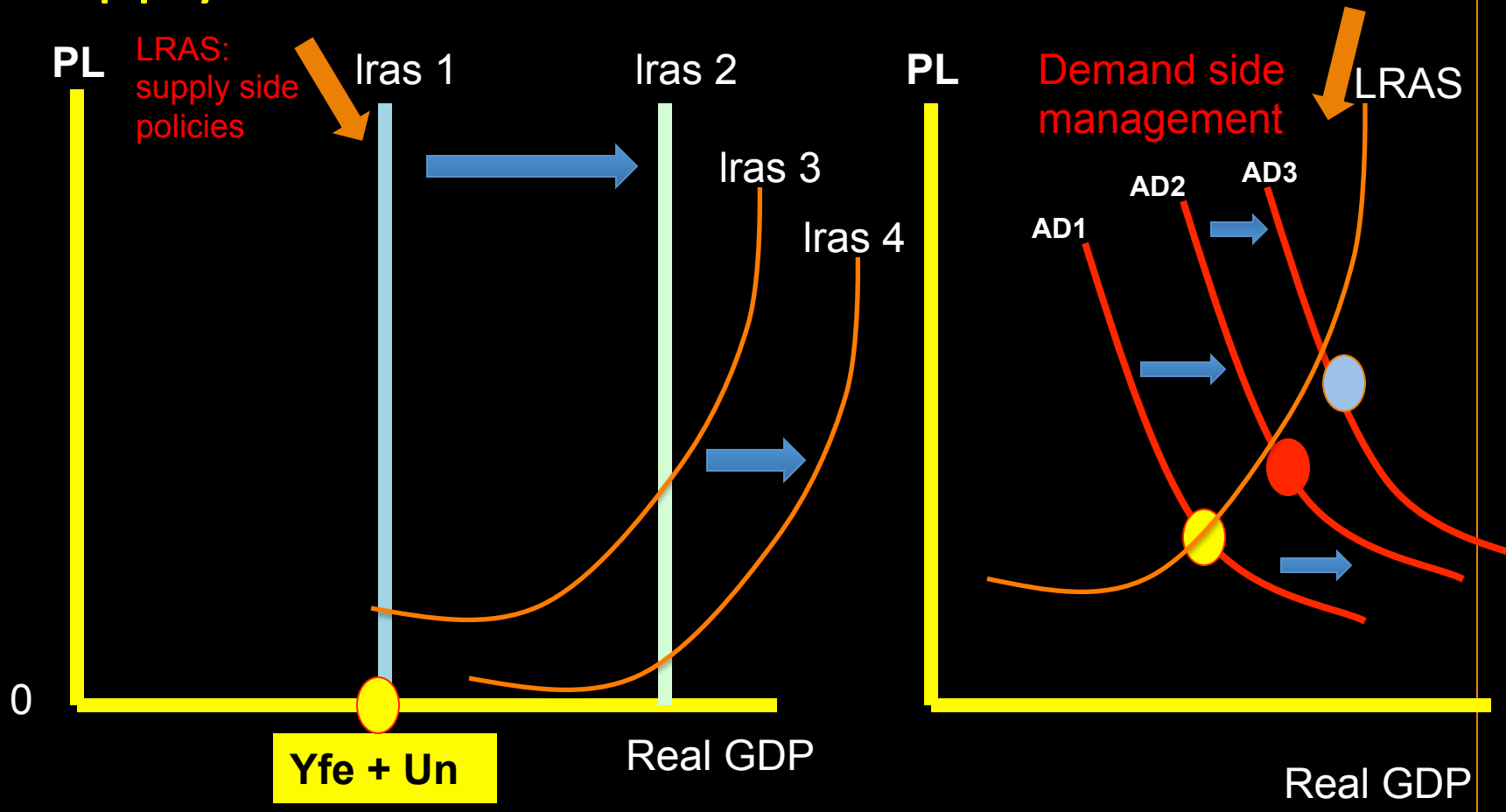
Big Idea

5

Know that there are 2 major alternatives to bring growth (more jobs) to an economy but several policies can be used to achieve either demand side or supply side management of the economy. 2 alternatives are supply side or demand management.

Diagram D: supply side or demand side managment

- Supply side or Demand side



Ib question 2010

HL paper 1 2010-May Unemployment

- **2a Explain why a country may wish to reduce its unemployment rate. 10/25**
- **2b Evaluate the likely effects on the economy of relying on demand-side policies to reduce the unemployment rate. 15/25**

Big Idea

6

There are 5 main policies a government can use to reduce unemployment

- Which policies will a government use to reduce unemployment?

1. Fiscal e.g. reduce direct taxes or increase G⬆
2. Monetary
3. Direct intervention: G⬆ (demand side)
4. Legislation: Minimum wage laws
5. Supply side policies

Ib question 2010

- **3. (a) Distinguish between structural and demand-deficient unemployment. [10 marks]**
- **(b) Discuss the view that the problem of unemployment can be reduced through the use of supply-side policies.**
- **(Note: a similar question could also ask you to consider connection between unemployment and demand side policies.)**
- **N14/3/ECONO/HP1/ENG/TZ0/XX**

See webnotes:

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232
233

2.3 Big Ideas

- Unemployment
- Inflation
- Growth
- Distribution

Read the syllabus items to understand the IB focus for this economic theory !

Big Idea 1 | Big Idea 2 | Big Idea 3 | Big Idea 4 | Big Idea 5 | Big Idea 6

Big Idea

1

Inflation has 2 main causes

- What **causes** inflation + what **damage** does inflation cause?

1. Cost push
2. Demand pull

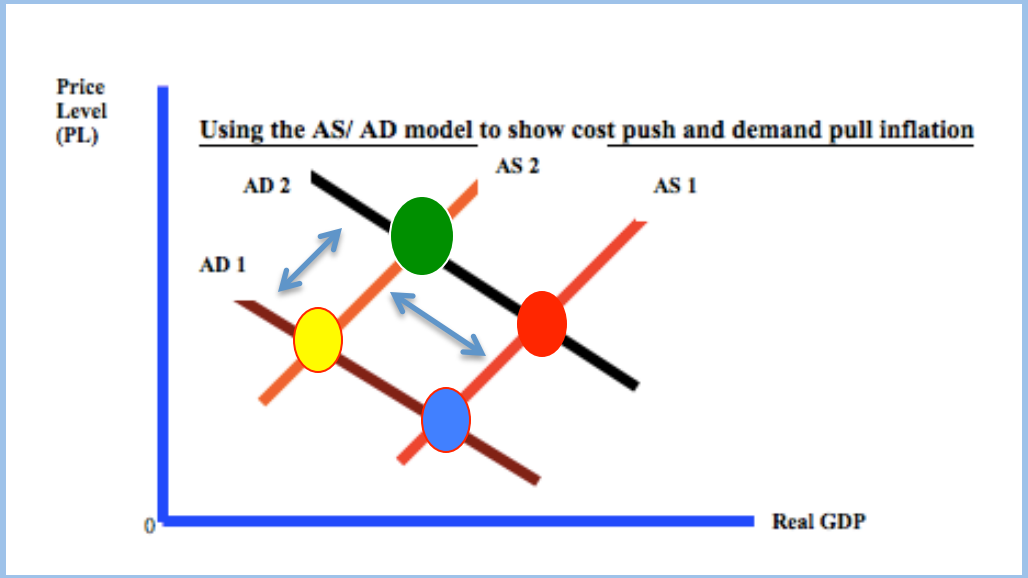
Know your vocabulary here:
E.g.

- Disinflation
- Deflation
- CPI
- Producer Price index
- Weighted price index

Inflation

- What **causes** inflation ?

1. Cost push
2. Demand pull



There are 2 good outcomes in the diagram opposite and 2 bad outcomes. Look at the 4 options on slide 22 to find out what is **'Good'** and what is **'Bad'**.

Big Idea 2

Inflation damages markets

- What **damage** does inflation cause?

1. Uncertainty – investment ↓
2. Redistribution effects – poor more affected
3. Less saving ↓
4. Exports ↓

Know your vocabulary here:
E.g.

- **Disinflation**
- **Deflation**
- **CPI**
- **Producer Price index**
- **Weighted price index**

Inflation

What damage does inflation cause?

A – below are 3 key problems caused by unexpected/ unanticipated inflation:

1. **Price Mechanism distorted: price mechanism serves to allocate scarce resources. This process is disturbed by inflation. The price mechanism has a major role to play in resource allocation. If the mechanism does not work due to problem inflation then the economy will function less effectively. Price mechanism allocates resources (FOP) and if the signalling system is damaged by unexpected inflation then poor allocative decisions will result.**

2. **Uncertainty: business and consumer confidence is affected. This impacts upon I and C in terms of the AD model. Important to note here is that investment may fall because firms don't know the cost of undertaking investments/expansion of the business firm. Look out for 'consumer' and 'business' confidence indices in the syllabus!**

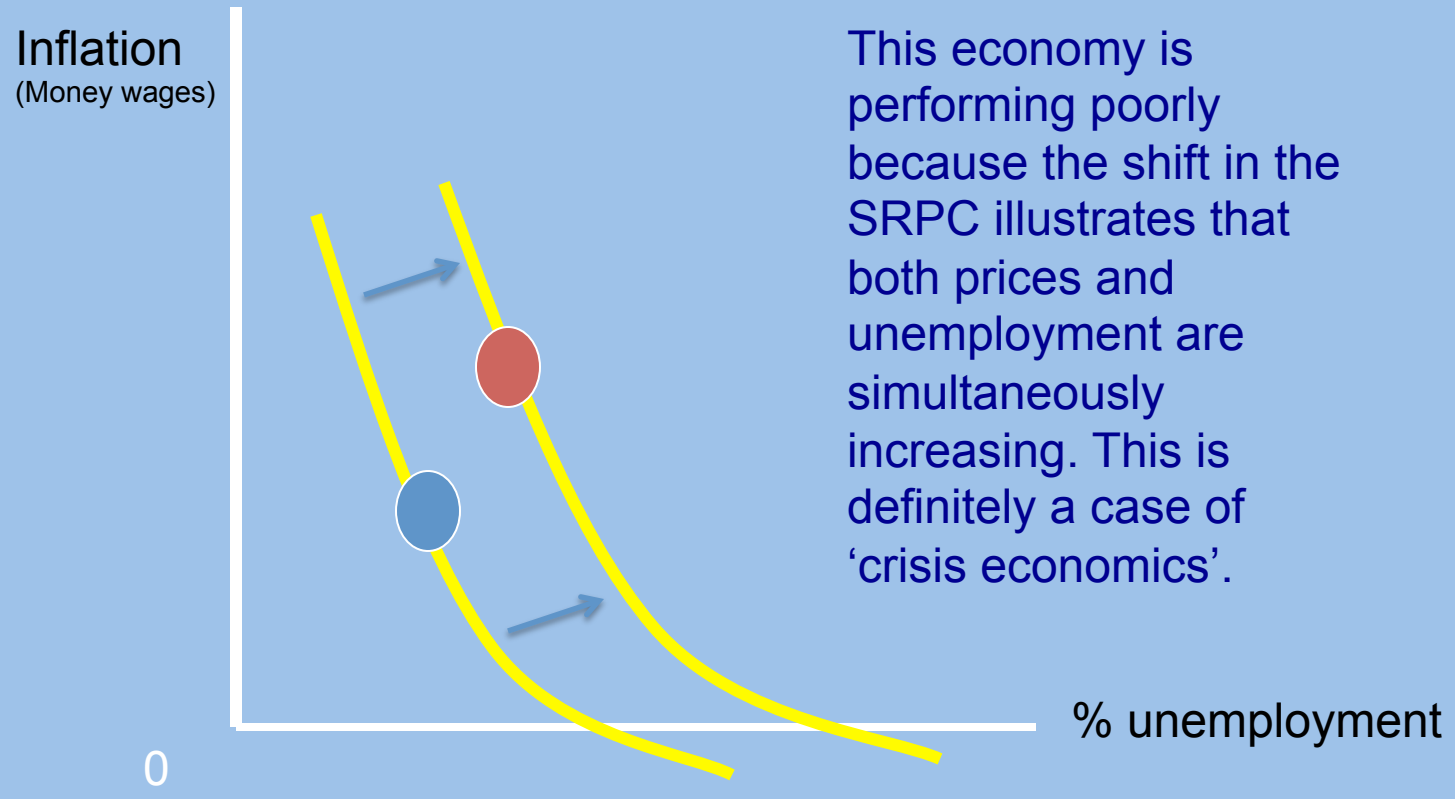
3. **Redistribution/ increased poverty: for low income earners where income does not follow the inflation rate for extended periods of time e.g. for fixed income earners such as pensioners any increase may have to wait until the next fiscal budget.**

Inflation + Stagflation + Hyperinflation and disinflation

- What **damage** does **inflation** cause? Depends on extent of inflation: anticipated, unanticipated, good/bad inflation, hyperinflation (eg Germany 1923 or Zimbabwe (2000) ?
- See **stagflation, Philips curve SR + LR** as there is a dispute as to how to manage natural unemployment in relation to inflation i.e. LRPC shows that demand side does not work and therefore supply side policies can work to shift AS
- **Hyperinflation:** Monetary system collapses. Germany 1923, Zimbabwe 2000, **Venezuela 2018**

Diagram C: **Stagflation**. This is where inflation and unployment increase at the same time.

- Philips Curve



This economy is performing poorly because the shift in the SRPC illustrates that both prices and unemployment are simultaneously increasing. This is definitely a case of 'crisis economics'.

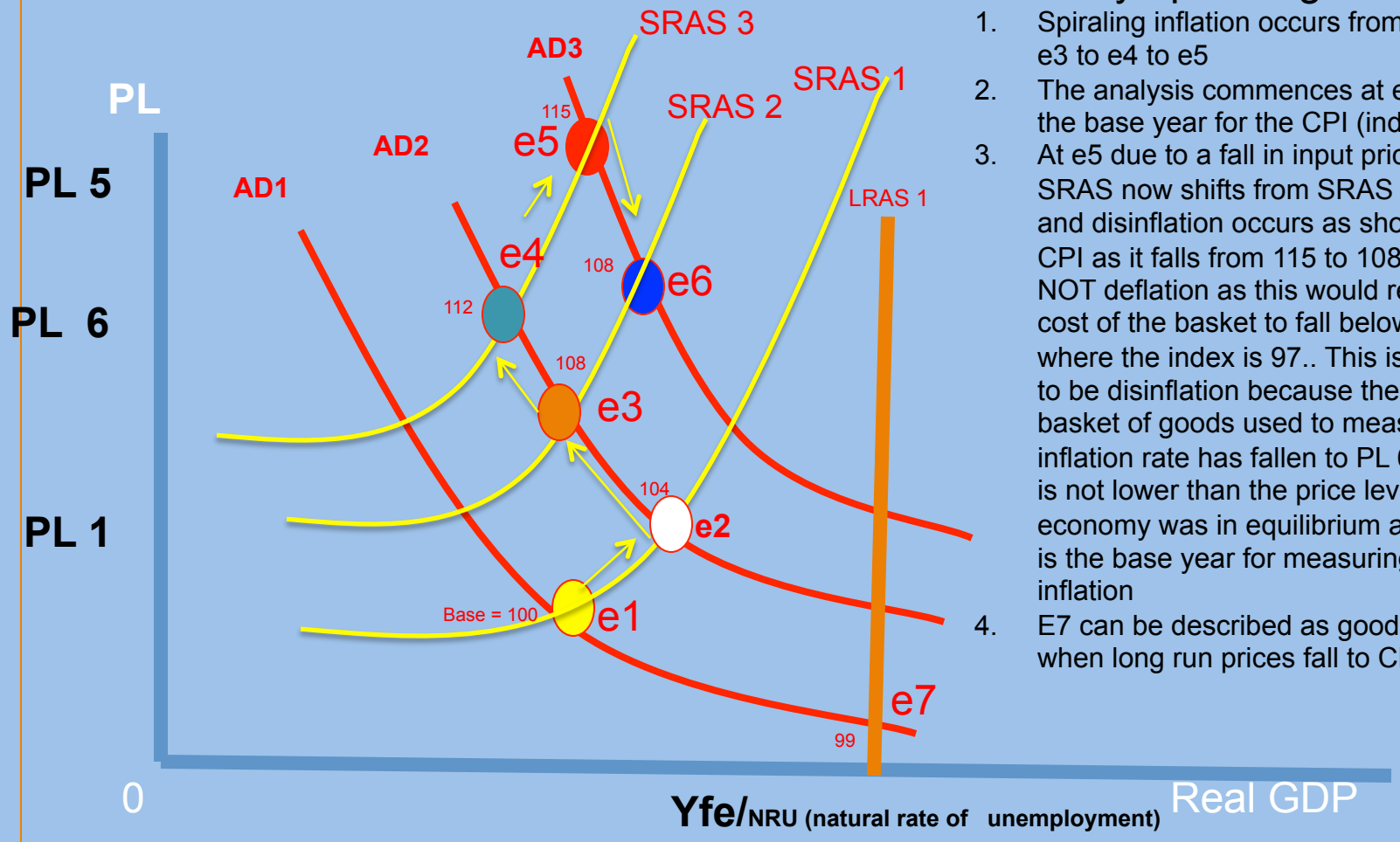
2.3: SUMMARY

1. Economies have a natural rate of unemployment- see webnote 316. (task 1)
2. How to tackle this rate of unemployment is the issue that divides economists Demand side or supply side policies?
3. Is there a trade off between inflation and unemployment? (task 2) The short run Phillips curve suggests 'YES'-until 1966!
4. The Phillips curve appeared to show the impossibility of achieving 2 key government policy objectives simultaneously i.e. policy conflict see webnote 409
5. Phillips curve works only in short run and will be vertical in long run as shown in diagram B i.e no trade off (task 3)
6. How do you show stagflation? See diagram C. (task 4)

Disinflation is when the rate of increase of the price level falls i.e. a lower rate of inflation

Diagram F: how to draw disinflation using AS + AD?

Disinflation in the Short Run



Assume that the economy is currently operating at e1:

1. Spiraling inflation occurs from e1 to e2 to e3 to e4 to e5
2. The analysis commences at e1 which is the base year for the CPI (index =100).
3. At e5 due to a fall in input prices the SRAS now shifts from SRAS 3 to SRAS 2 and disinflation occurs as shown by the CPI as it falls from 115 to 108 but it is NOT deflation as this would require the cost of the basket to fall below 100 i.e. e7 where the index is 97.. This is understood to be disinflation because the cost of the basket of goods used to measure the inflation rate has fallen to PL 6 but this PL is not lower than the price level when the economy was in equilibrium at e1 which is the base year for measuring the inflation
4. E7 can be described as good deflation when long run prices fall to CPI value 99.

Big Idea

3

Deflation also damages the economy because confidence falls and firms and households reduce spending

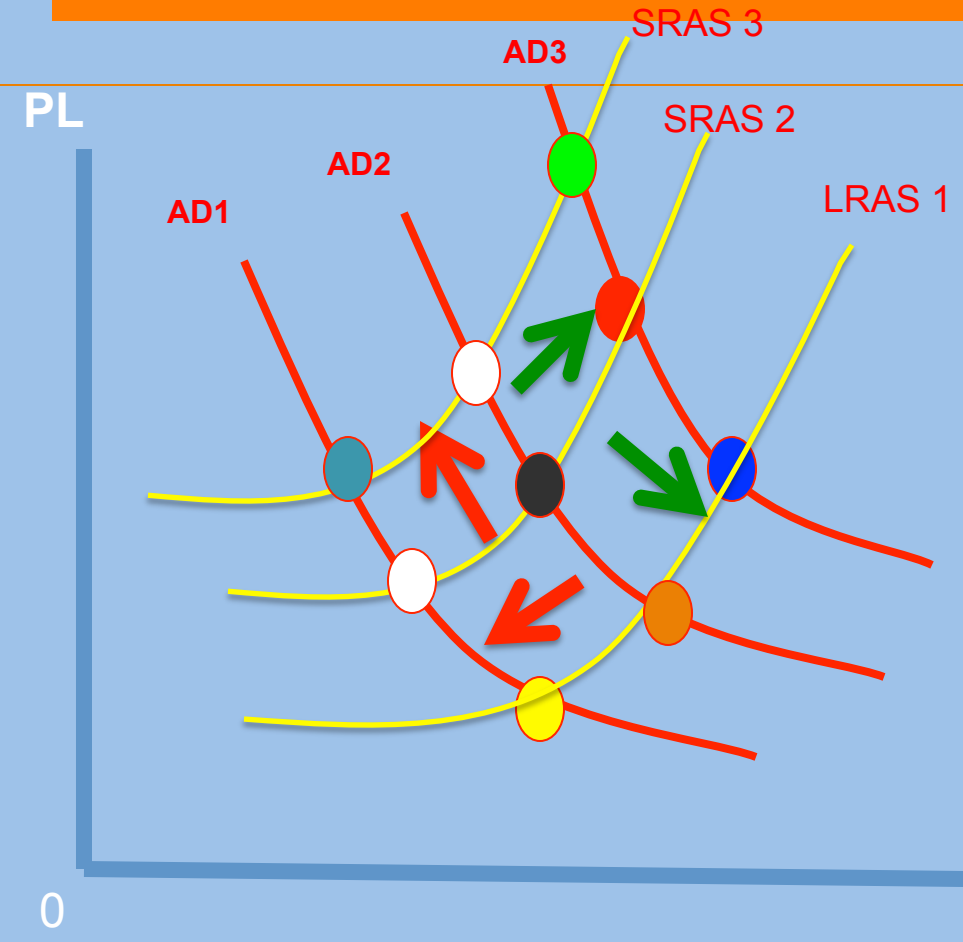
- What **damage** does DEflation cause?

1. Uncertainty – investment ⬇ (including FDI)
2. Unemployment (cyclical) – TR⬇ Job cuts to protect profit
3. Research: check out Japan and deflation

Big Idea

4

The price level can go up or down but there are 4 Alternatives for Macroeconomy This raises the question of whether the governmentsupply side or demand side management?



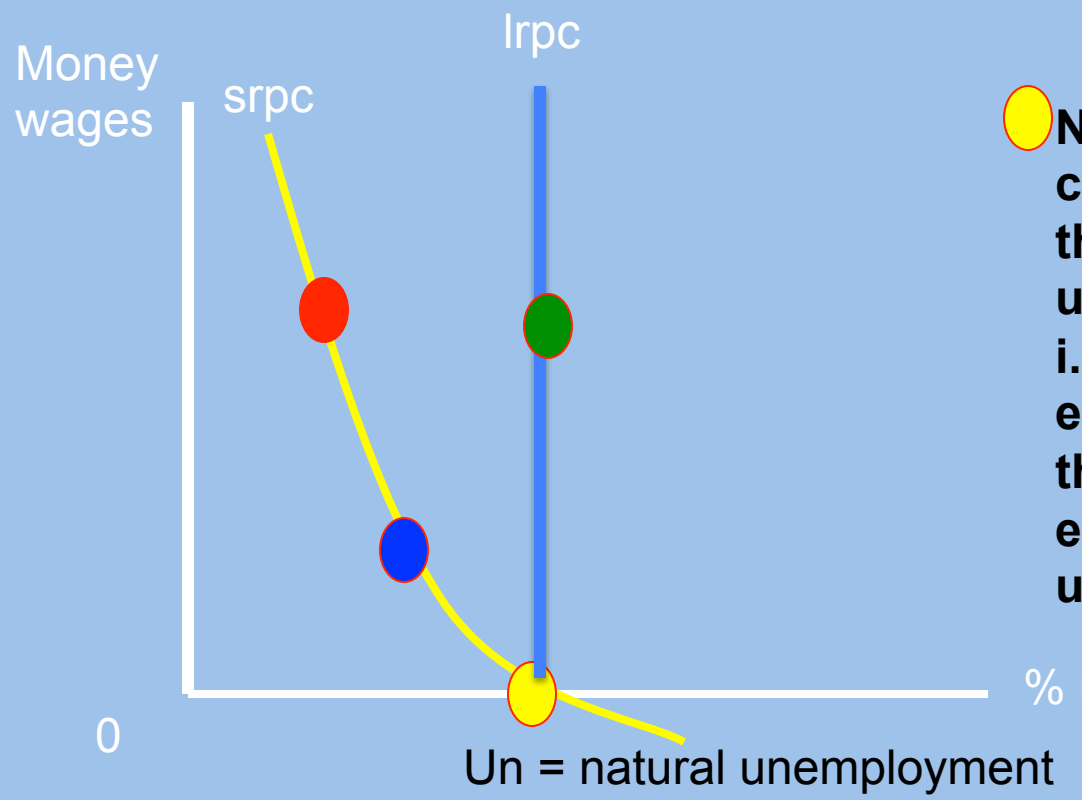
Can you spot which direction/ coloured dots relates to 1-4 ?

1. Demand pull inflation(good inflation)
2. Cost push inflation (bad inflation)
3. Supply side growth firstly with disinflation in the short run and eventually deflation in the long run as supply side policies adjust the LRAS but note that the economy is growing ('ryanair effect' markets are getting bigger at lower prices i.e. deflation). Can be described as 'good deflation'
4. Deflation. Bad deflation where prices fall and output is falling. Research Japan and deflation.

Big Idea 5

The philips curve can be used to show inflation, growth (employment) and recession (unemployment). The SRPC makes an argument for demand side policies while the LRPC makes an argument for supply side policies

Philips Curve



Note: Philips Curve cuts the 'X' axis at the Natural unemployment rate i.e. Yfe or full employment. This is the idea of "full employment with unemployment".

HL Only - LRPC

Diagram B: Long + Short Run Philips Curve

Labour market in equilibrium with natural rate of unemployment and can be = full employment equilibrium

Fig 1: Philips Curve SR + LR

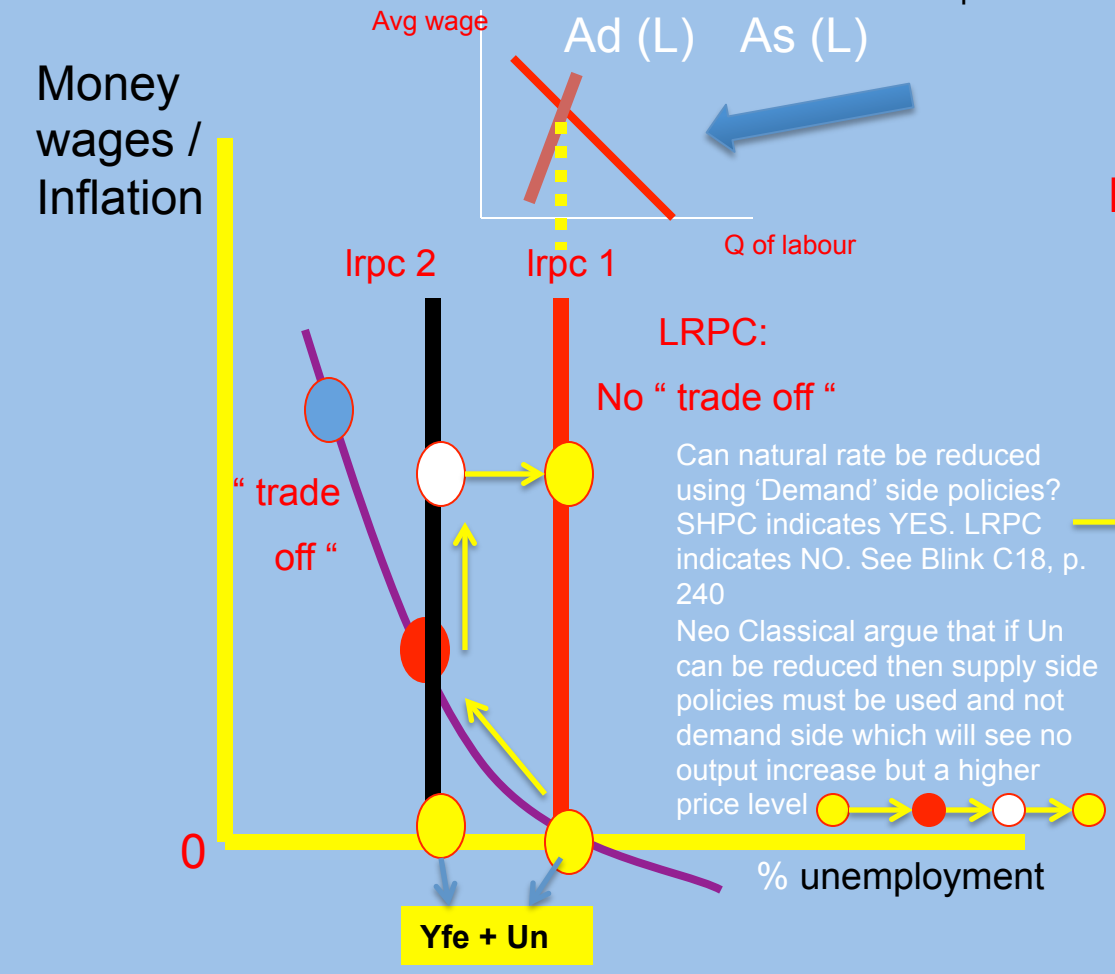
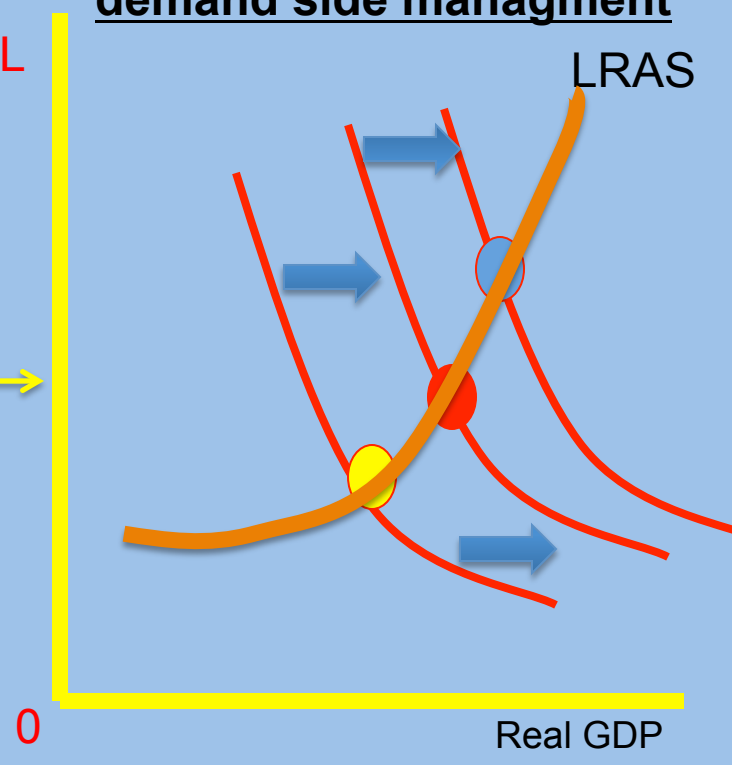


Fig 2: AS + AD to show demand side managment



Big Idea

6

Inflation is measured by calculation the average price of a basket of goods over time. In Germany the basket has over 700 goods and services. How is it measured? **See webnote 233**

Price Level: how is inflation measured?

- **CPI / RPI**
- **Simple vs composite price index (weighted index)**
- **To express any number as an index or a % of the base year do the following:**

  1) new price / base price X 100

  2) base price

Measuring Inflation-the basket of goods idea!!!

Inflation

- 3 (a) Explain the difference between cost-push and demand-pull inflation. [10 marks]
- 3 (b) “A rise in the inflation rate will always result in negative consequences for
- the economy.” To what extent is this statement true? [15 marks]
- N14/3/ECONO/SP1/ENG/TZ0/XX

2.3 Big Ideas

- Unemployment
- Inflation
- Growth
- Distribution

Read the syllabus items to understand the IB focus for this economic theory !

Big Idea

1

There are 5 models that can be used to show growth

- AS/AD
- PPC
- Philips curve
- Business cycle
- Circular flow

Big Idea 2

Growth can be attained using suppy or demand side policies

- Supply side or Demand side

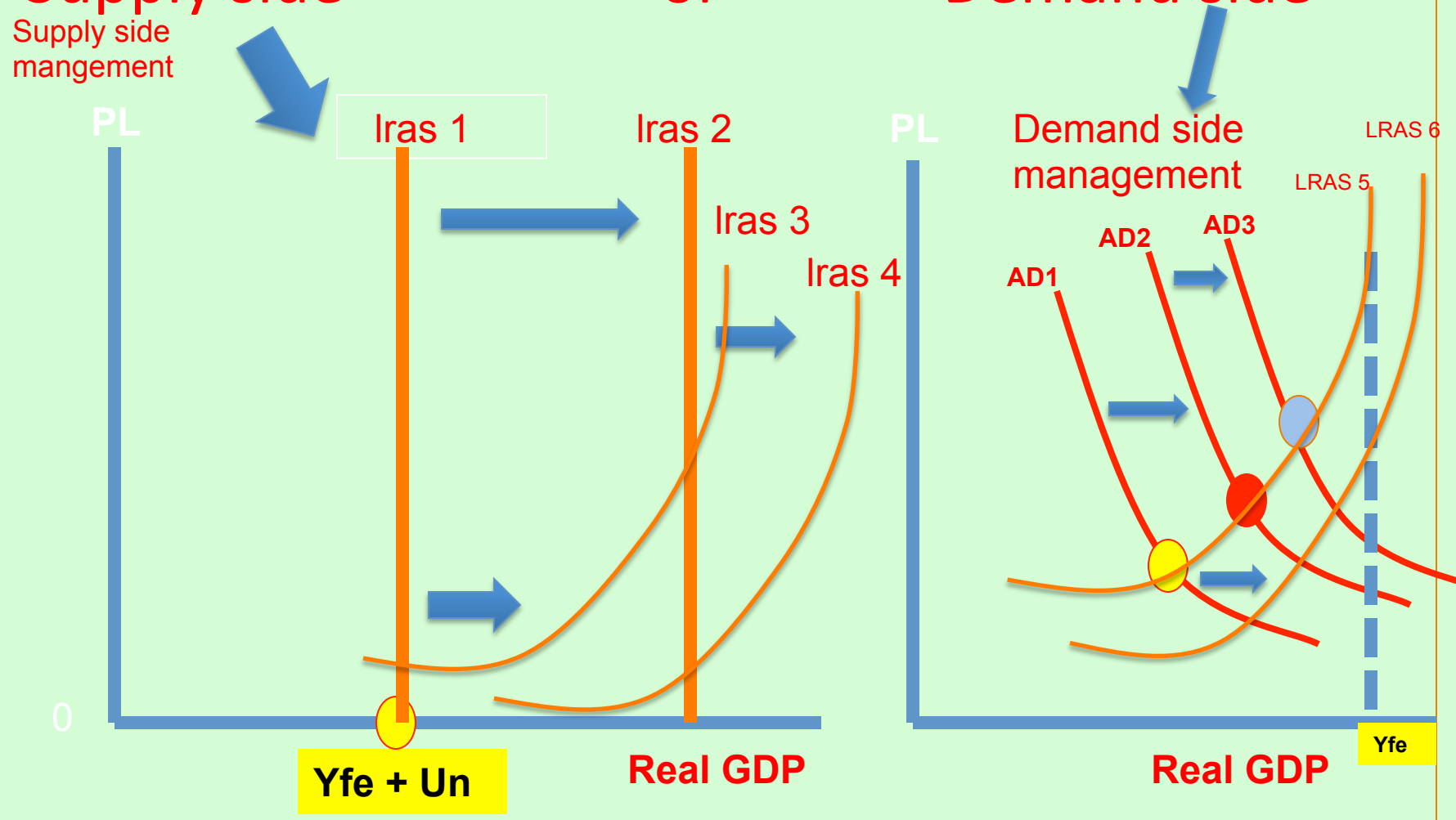
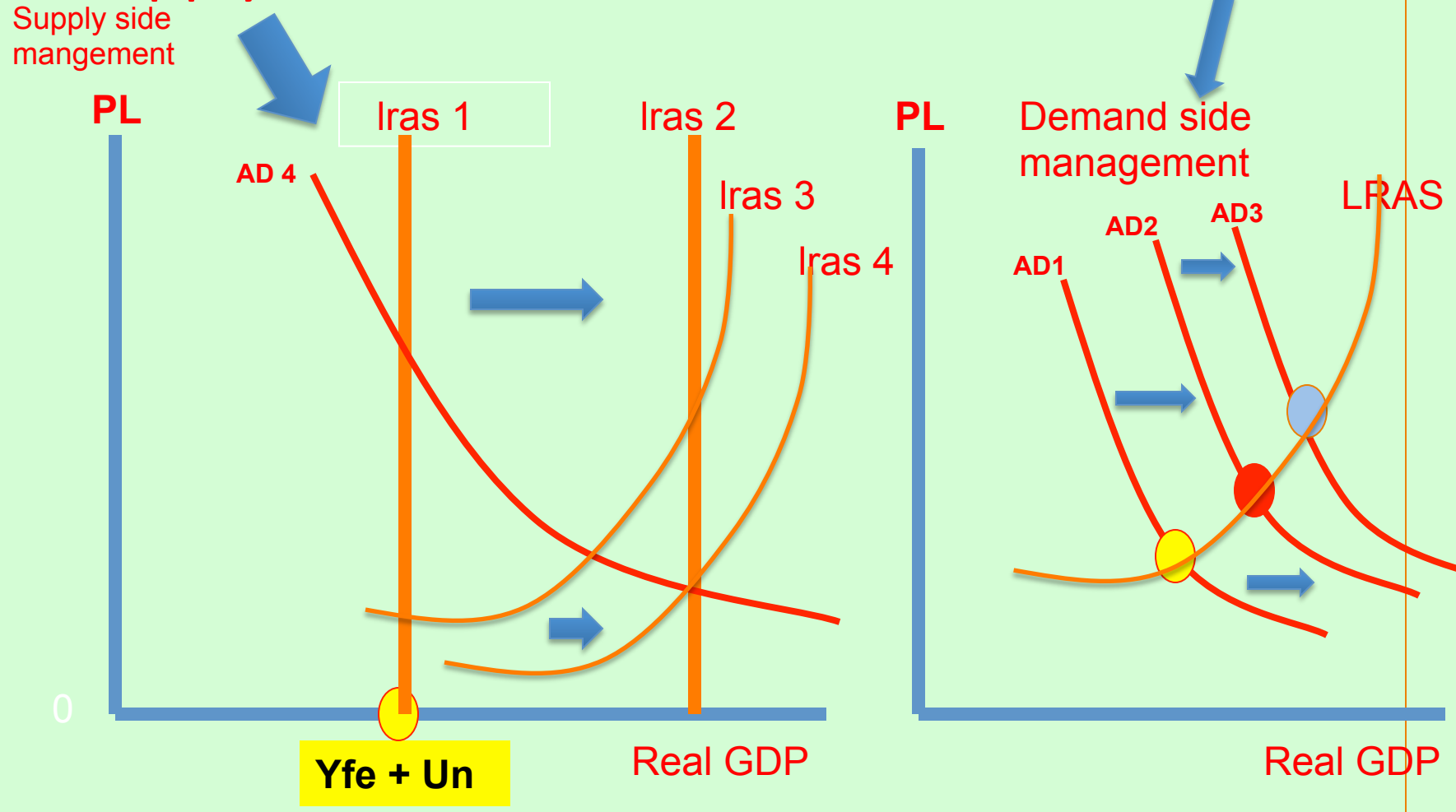


Diagram E: supply side or demand side management?

- Supply side or Demand side



Growth

HL 1 2014 May

- **3a) Explain two factors which might cause economic growth. (10 marks)**

- **3b) Evaluate the view that the benefits of economic growth will always outweigh the costs. (15 marks)**

May 2014 Growth

4. (a) Explain *two* factors which might cause economic growth. ***[10 marks]***

Answers **may** include:

- definition of economic growth
- diagrams to illustrate economic growth, for example by a rightward shift of AD and/or LRAS
- an explanation of any two factors that might lead to economic growth such as investment in physical, human and natural capital, productivity gains, rise in net exports
- examples of instances where factors have led to economic growth.

May 2014 Growth

(b) Evaluate the view that the benefits of economic growth will always outweigh the costs. ***[15 marks]***

N.B. It should be noted that definitions, theory, and examples that have already been given in part (a), and then referred to in part (b) should be rewarded.

Answers **may** include:

- definition of economic growth
- diagrams to illustrate the costs and benefits
- an explanation of the potential benefits of growth *eg* higher living standards and on government finances; the potential costs, *eg* on sustainable development and in terms of the possible conflicts with the other goals of economic policy such as low inflation or equity in the distribution of income
- examples of costs/benefits of growth which have occurred, or might occur
- synthesis or evaluation (evaluate).

Consider term
"Evaluate" requires candidates to make an appraisal by weighing up the strengths and limitations.

Evaluation **may** include: an evaluation of the positive and negative consequences of growth.

Examiners should be aware that candidates may take a different approach which, if appropriate, should be rewarded.

Opinions or conclusions should be presented clearly and should be supported by appropriate examples.

2.3 Big Ideas

- Unemployment
- Inflation
- Growth
- Distribution of income

Read the syllabus items to understand the IB focus for this economic theory !

Big Idea 1

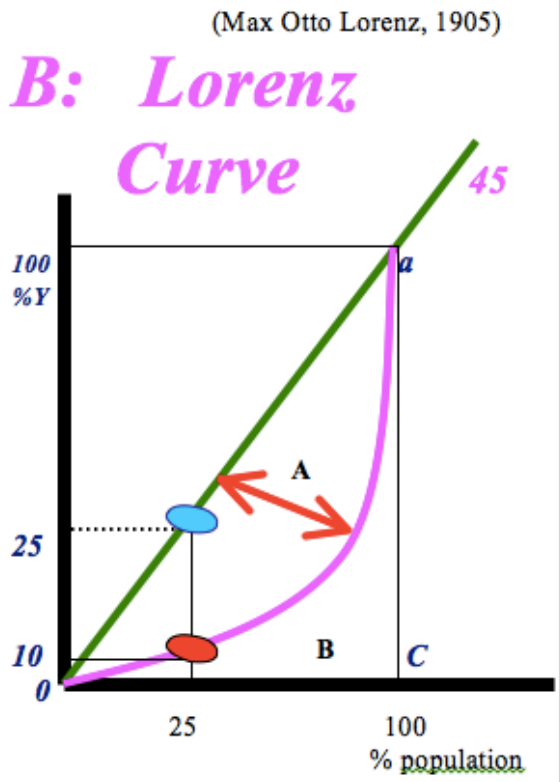
Big Idea 2

Big Idea 3

Big Idea

1

The Lorenz curve shows Income Distribution in terms of equality an inequality – webnote 239



(Corrado Gini)

C: Gini Concentration Ratio

Formula is

Area of : A/A+B

or

Oa Lorenz curve / oaC

Gini coefficient: Examples

	1980	1990	1994
UK	0.327	0.333	0.345
Spain	0.397	0.381	0.340
Fra	0.417	0.399	0.290
Sweden		2002	0.25
Luxemborug		2002	0.27
Switzerland		2002	0.27
Brazil		2002	0.61

While most developed European nations tend to have Gini coefficients between 0.24 and 0.36, the United States Gini coefficient is above 0.4, indicating that the United States has greater inequality.Characteristics of Gini coefficient

Note for HP3: calculate gini (see formula opposite)

Do you understand? A nice way to understand the gini co coefficient and its relationship to the Lorenz curve is:

- Gini = **0.65**
- This means that A (banana shaped area) is 65% of the total triangle aco
- This represents a poor distribution of income

Gini coefficient values range from 0-1

Zero ← → 1

Poverty reduction ← → Poverty increase

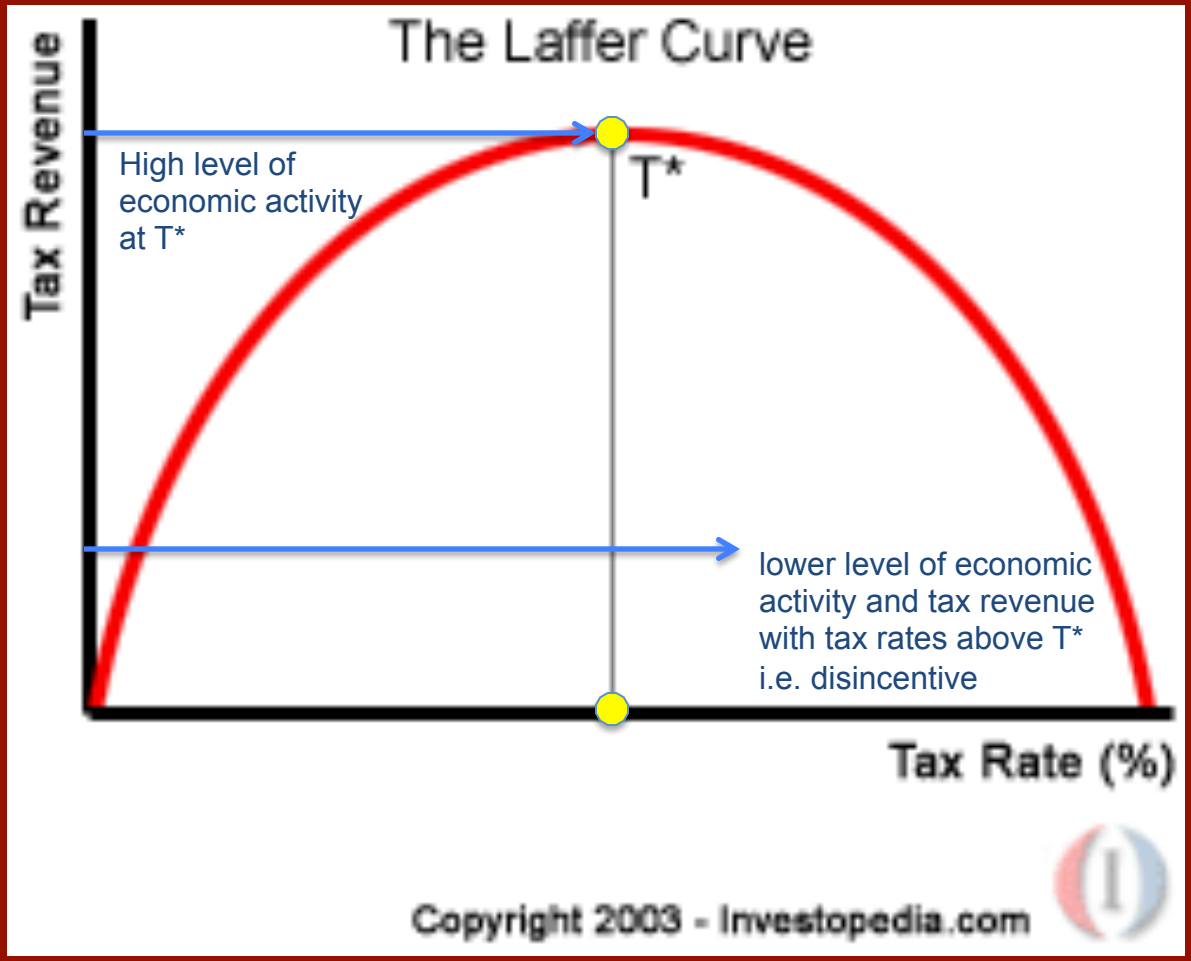
Big Idea

2

Laffer Curve show that if direct taxes are too high incentive will fall and economic activity/growth will also fall- see webnote 2341

Note that a higher tax revenue indicates a higher level of economic activity i.e. growth . T* shows that the best average tax rate will result in higher growth resulting in higher tax revenue

Note: Laffer is not in the syllabus but well worth knowing



Big Idea

3

Income Distribution using progressive direct taxes will improve the standard of living and help to reduce poverty. It has therefore a significant connection with section 4 'development'- see webnote 2340

Points to note:

(1)Government aim to improve distribution should focus on a direct tax system based on the red line (P)

(2)The blue line which is proportional is unfair for lower income earners e.g. if the average rate of tax is 45 % then lower income earners are disadvantaged

(3) You should be aware of how taxes are calculated via tax **rates and tax bands as these affect the slope of the lines in fig2**

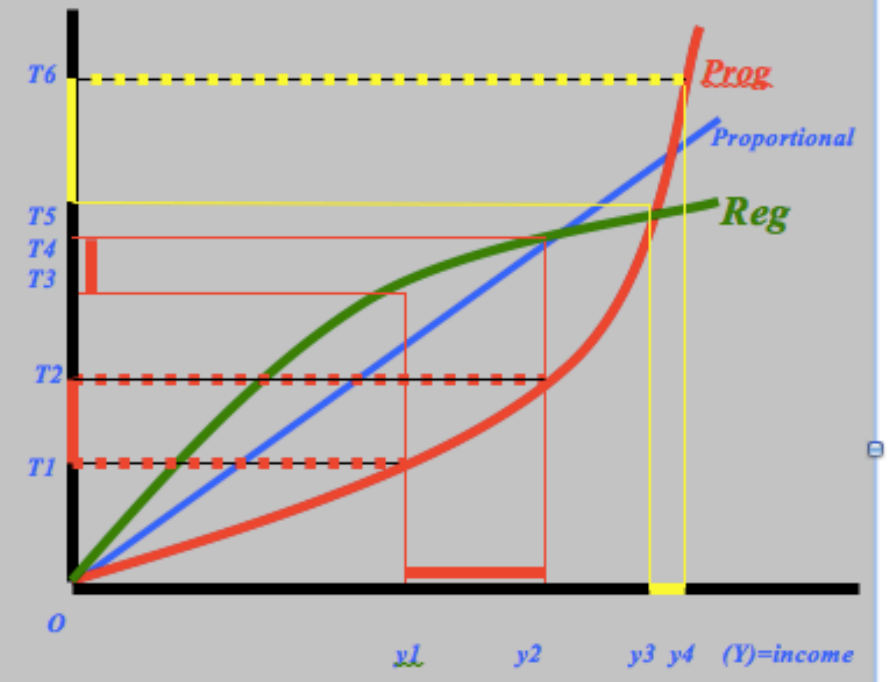
(4)If the government does not get its progressive tax system equitable then it runs the risk of more:

- Black market activity
- 'brain drain'
- capital flight

Note 1: average rate of tax is total tax paid divided by total income

Note 2: fig 2 only relevant for direct taxes as indirect taxes are completely independent of incomes i.e. rate of tax is unrelated to income level.

Fig2. Progressive, regressive and proportional taxation (for direct taxation)



***P** = progressive as average rate of tax increases as income Y increases y1 to y2 the tax paid increases from t1 to t2 but for income y3 to y4 the tax rises substantially to t5 to t6.*

***R** = average rate of tax decreases as income Y increases. Total tax paid increases from t3 to t4*

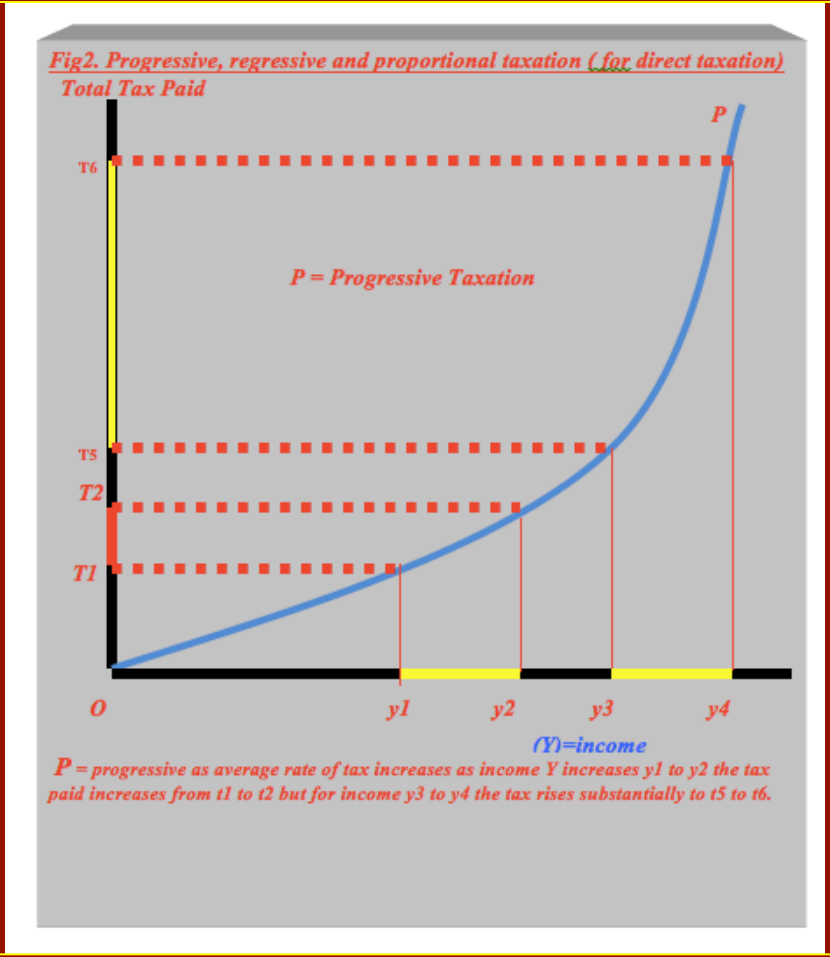
***Prop** = average rate of tax remains unchanged as Y increases e.g. 45 degree line*

Note: this system is progressive because the income earner who increases income from y1 – y 2(red line segment) pays T1-T2 taxes (red) and not T3-T4 (red) as would be the case in a regressive system.

Note: answer to task 1 = 70.750

Page 2 of 2

Income Distribution- see webnote 2340
Progressive Taxation



Germany – Progressive taxation

Single		Married	
Tax	Tax Base (in EUR)	Tax	Tax Base (in EUR)
0 %	up to 7 664	0 %	up to 15 329
15 %	7 665- 52 153	15 %	15 330 - 104 304
42 %	52 154 - 250 000	42 %	104 305 - 500 000
45 %	250 001 and over	45 %	500 001 and over

USA – Progressive taxation

2016 tax brackets

Tax rate	Single	Head of household
10%	$0 to $9,275	$0 to $13,250
15%	$9,276 to $37,650	$13,251 to $50,400
25%	$37,651 to $91,150	$50,401 to $130,150
28%	$91,151 to $190,150	$130,151 to $210,800
33%	$190,151 to $413,350	$210,801 to $413,350
35%	$413,351 to $415,050	$413,351 to $441,000
39.6%	$415,051 or more	$441,001 or more

UK – Progressive taxation ? Late 1960's

How the Beatles Dealt With a 98% Income Tax (That's right 98%)

Posted on March 22, 2013 by Nick Sorrentino

When I was a small child we lived in the United Kingdom for a couple of years just before the Thatcher revolution. In the years afterward, after we were back in the states and I was a bit older I can remember my parents talking about how colossally messed up Britain was economically. The 1970s weren't great for America, but for our friends across the pond they were far worse.

UK – Progressive taxation ? Late 1960's

> *(From Bloomberg.com)*
>
> *The top rate for British taxpayers in the mid-1960s reached 83 percent. The wealthiest among them paid a 15 percent* ***super-tax*** *on top of that, pushing taxes as high as 98 percent. The pain came out in the band's music. George Harrison opened his 1966 song "Taxman":*
>
> *Let me tell you how it will be.*
> *That's one for you, 19 for me...*
> *Should 5 percent appear too small,*
> *Be thankful I don't take it all.*
>
> *As Lennon and McCartney racked up hits with their compositions in 1963 and 1964 — "Please Please Me," "From Me to You," "I Want to Hold Your Hand," "She Loves You," to name a few — and money started pouring in, it became clear that the songwriting profits would be siphoned away to the U.K.'s treasury if something wasn't done.*

IBQ: Income DIstribution

M11/3/ECONO/HP1/ENG/TZ2/XX/M
2. (a) Explain two policies a government might use to redistribute income. [10 marks]

(b) “Measures to promote greater income equality should be a key feature of government economic policy.” Evaluate this proposition. [15 marks]

IBQ: Income DIstribution

- **4. (a) Using an appropriate diagram, explain how a recession might lead to more poverty. [10 marks]**

- **(b) Evaluate the view that attempts to achieve greater equity in the distribution of income will reduce economic efficiency. [15 marks]**

N14/3/ECONO/SP1/ENG/TZ0/XX