ETAWA ECONOMICS REVISION 2021

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ECONOMICS EXAM
Monday November 15
9.20am

79 More Sleeps!

Examiners Report

- The use of ***economic models*** (diagrams) is important – you must be able to use an appropriate model, fully labelled, and refer to it in your written responses.

- In Section Two, it is vital that you ***refer to the data*** provided in the question within your answer – e.g. the question will often state 'with reference to the data/table/graph/article'.

- Graphs with 2 vertical axes - ensure you understand whether you must refer to the LHS axis or the RHS axis.

Examiners Report

- Significant *economic events* – e.g. changes in the business cycle, the current account surplus, the terms of trade, the exchange rate, monetary & fiscal policy – are likely to be directly referenced in the examination.

- The most appropriate model to use to show the different phases of the **business cycle** is the one showing **both the LRAS and the SRAS curves**.

Q30 (a) Use the AD/AS model to demonstrate and explain the characteristics of the boom phase of the business cycle. (10 marks)

Unit 3 Australia & the Global Economy

1. **Global interdependence (s2)**
2. *Free Trade & Protection (s3)*
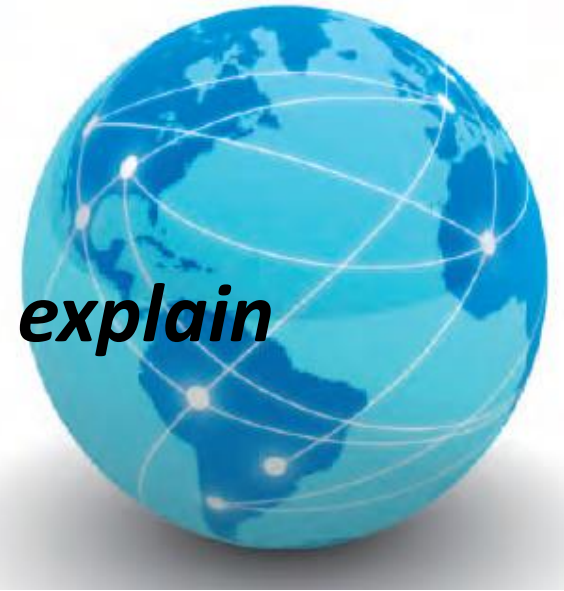3. **Pattern of trade**
4. *Balance of payments (s3)*
5. *Terms of trade*
6. *Exchange rates (s2)*
7. **Foreign investment/foreign liabilities**

Important links to unit 4

Unit 3

*The **key models** – use the **demand/supply model** to explain*

1. *The gains from trade/comparative advantage*
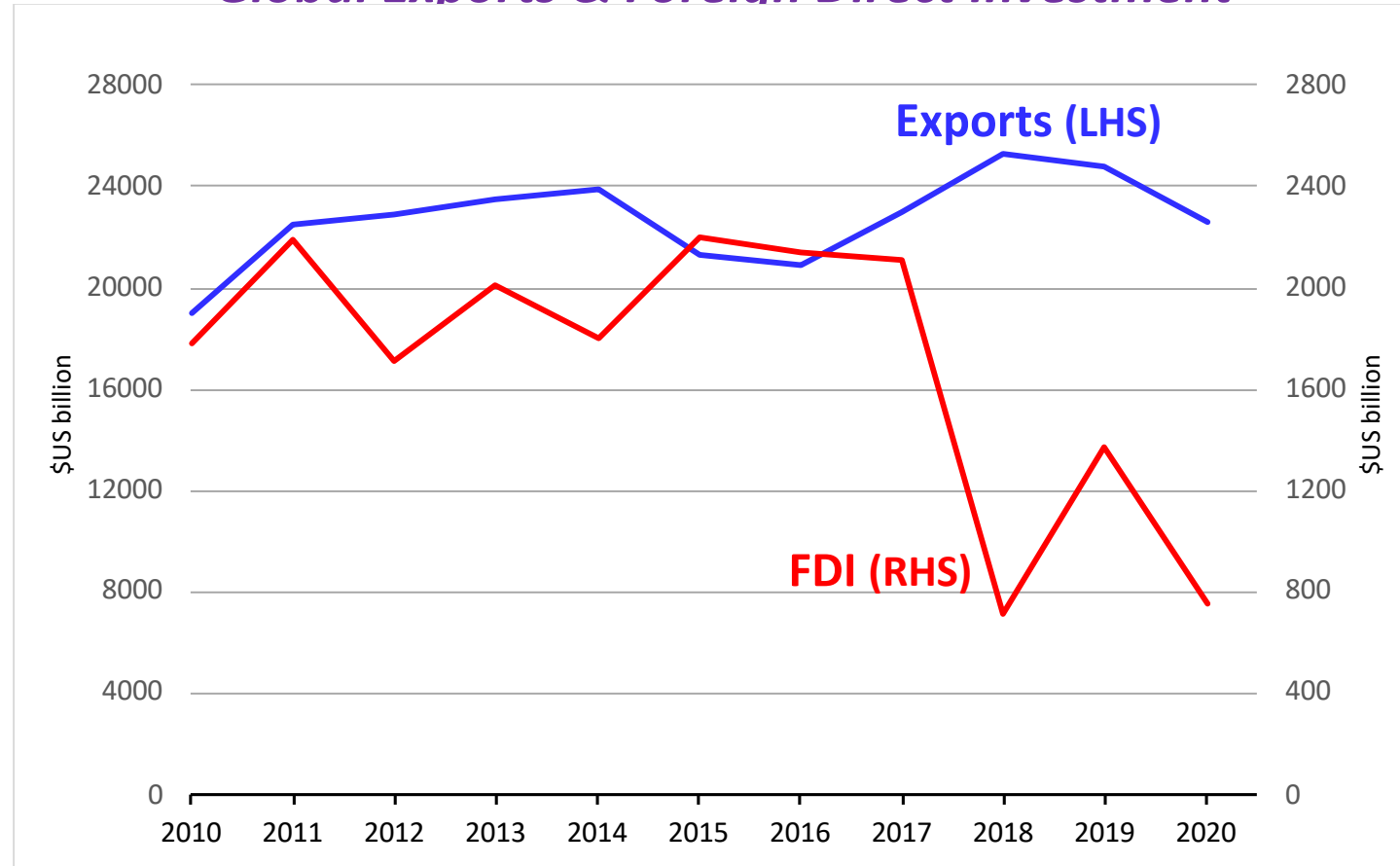2. *The costs of protection – tariffs & subsidies*
3. *The exchange rate – AUD*

*The **key answers** I should know*

1. *Current account surplus*
2. *Commodity prices (inside the ToT)*
3. *China*
4. *The S - I gap*

Global Interdependence

- Globalisation has been *slowing* since the GFC.

- In 2020, the COVID-19 pandemic caused global trade to fall by **10%** and global FDI to fall by **35%**.

- The pandemic highlights both the negatives & positives of interdependence.

Global Exports & Foreign Direct Investment

Exports (LHS)

FDI (RHS)

$US billion

$US billion

2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

0 4000 8000 12000 16000 20000 24000 28000

0 400 800 1200 1600 2000 2400 2800

International Competitiveness

- Linked to comparative advantage
- Why is competitiveness important?
- How would the following factors affect a country's competitiveness?
  - An increase in *productivity*   <u>*Increase*</u>
  - A rise in the *exchange rate*   <u>*Decrease*</u>
  - An increase in *inflation*   <u>*Decrease*</u>
  - A cut in *tariffs*   <u>*Increase*</u>
  - An increase in *subsidies*   <u>*Decrease*</u>

Comparative Advantage

	Output Beef		Output Corn
Country A	5000	or	5000
Country B	2000	or	4000

Who has the comparative advantage in each good?

A possible terms of trade could be

(a) 1 beef trades for 0.5 corn

♥ 1 beef trades for 1.5 corn

(c) 1 corn trades for 1.5 beef

(d) 1 corn trades for 0.4 beef

The Benefits of Free Trade

Comparative advantage & the gains from trade can be shown using the *Demand/Supply model*

- Compare world price with domestic price
    - if Pw > Pd, then the country has a *comparative advantage* – it **exports**
    - If Pw < Pd, then the country has a *comparative disadvantage* – it **imports**
- In each case you need to show clearly who gains & who loses using *consumer & producer surplus*

Gains From Imports
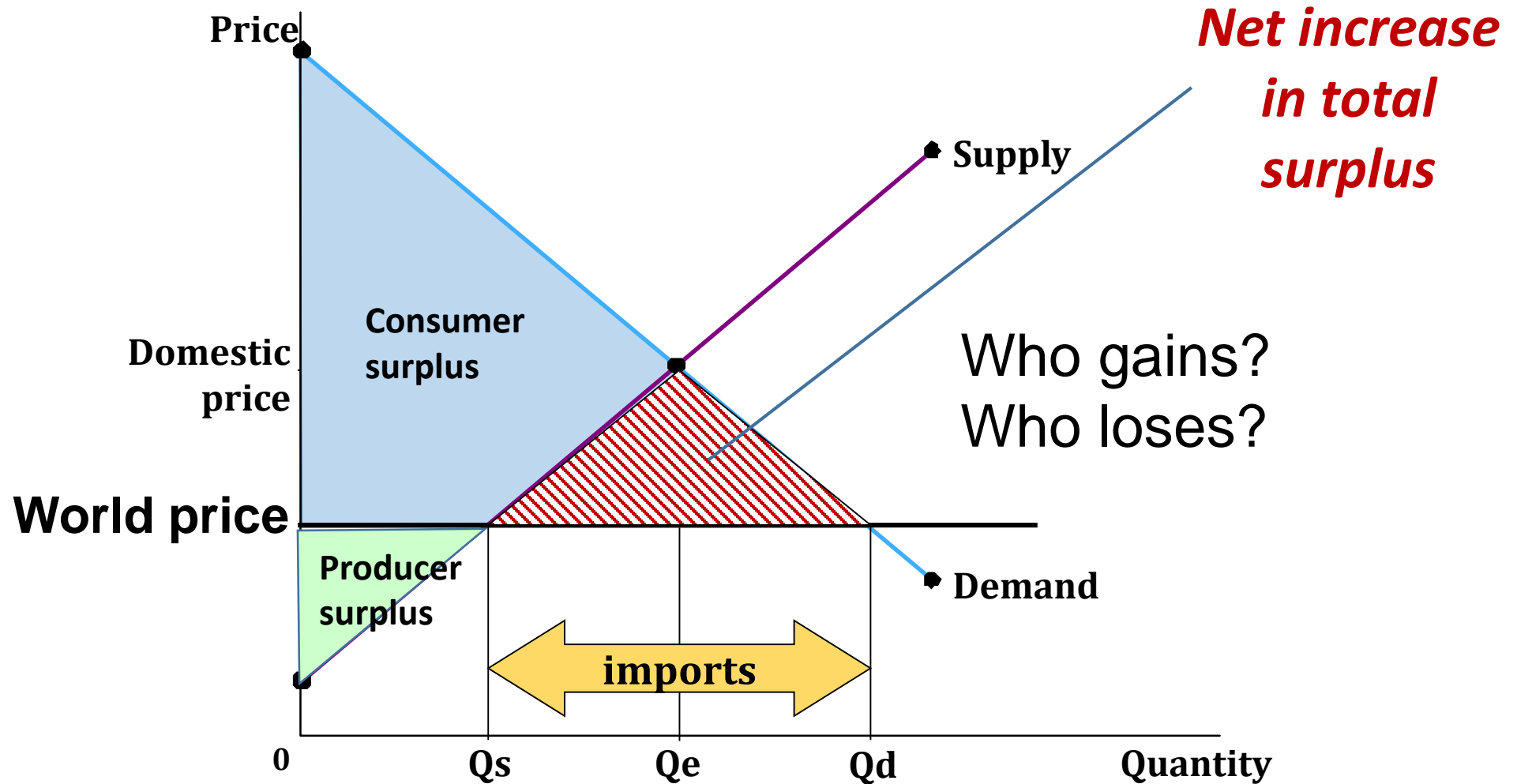
Protection

- ***Tariffs & subsidies*** **(2020)**
    - use the D/S model
    - Both tariffs & subsidies are inefficient because they create a deadweight loss
- Arguments for ***protection/against trade liberalisation***
    - ***Infant industry***
    - ***Dumping***
    - ***Diversification***
    - ***Strategic industries (national defence)***

Which of these was used by China against Australia

WACE 2020   41%

Which of the following is **not** a possible argument for supporting the implementation of trade restrictions by a nation?

(a) retaliation

(❤️) specialisation

(c) protection against cheaper foreign labour

(d) promotion of economic diversification

The Balance of Payments

The balance of payments is a record of a country's economic transactions with the rest of the world

It comprises 2 _interlinked_ accounts

1. The **current account** – *records transactions in goods, services & income*

2. The **capital & financial account** – records transactions in **financial assets** (foreign investment)

The two accounts MUST sum to ZERO Why??

The Balance of Payments

- For each transaction there is a matching credit and debit entry – this means that the overall balance of payments must always **balance**.

  - If Australia imports $1 million of cars, then it will be recorded as a **$1m debit** in the current account & a **$1m credit** _____ (export of currency) in the financial account
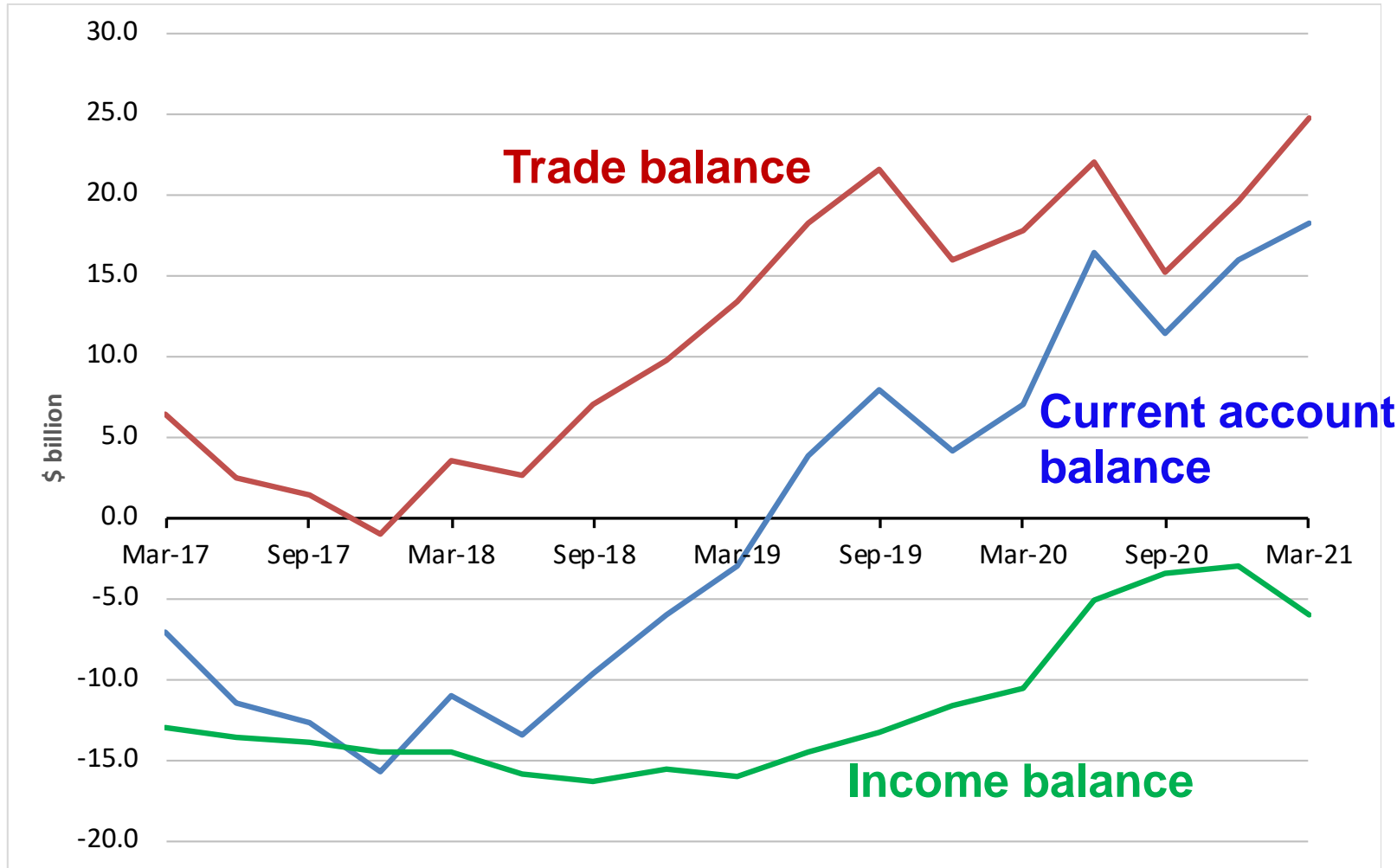
Topical Stuff

- Australia has recorded **8** consecutive qrtly *current account surpluses*!
- Why?
- What has happened to the *trade balance*?
- What has happened to the *income balance*?

Aust's Balance of Payments

	Dec 19	Dec 20
Current account	**$bn**	**$bn**
Exports	122	111
Imports	106	91
Trade balance	**16**	**20**
Net income	-12	-4
Current account	**+4**	**+16**
Capital/Financial	**-4**	**-16**

The Current Account

Can you label the curves?

Why is the current account in surplus?

1. Trade balance

2. Income balance

3. S > I

The Current Account Surplus

- ***Cyclical factors affecting the trade balance***
  - *China's demand for Aust's resources*
  - *Weak domestic demand in Australia*
  - *Commodity prices*
- ***Structural factors affecting the income balance***
  - *Record low global interest rates*
 - *Decreased foreign investment (financial account deficit)*

The Savings-Investment gap

- **The CAB** = **S − I**

- Australia's investment is normally greater than its savings: (I > S) resulting in a current account deficit

- But over the past few years S > I so the current account has recorded a *surplus*

- *If saving increases relative to investment, the CAB will* ___*increase*___

- *If Aust's economic growth increases, the CAB will* ___*decrease*___

Terms of Trade

- Australia's terms of trade is calculated as the ratio of its export prices to its import prices.

- ToT = XPI/MPI x 100

- What's the most important category in Aust's XPI?
  Commodities

- What are commodities? Examples . . *Iron ore; coal; LNG; rural*

- What's the most important category in the Aust's MPI?
  Manufactures

- Can the ToT increase if the export price index falls? *Yes*

Australia's Terms of Trade
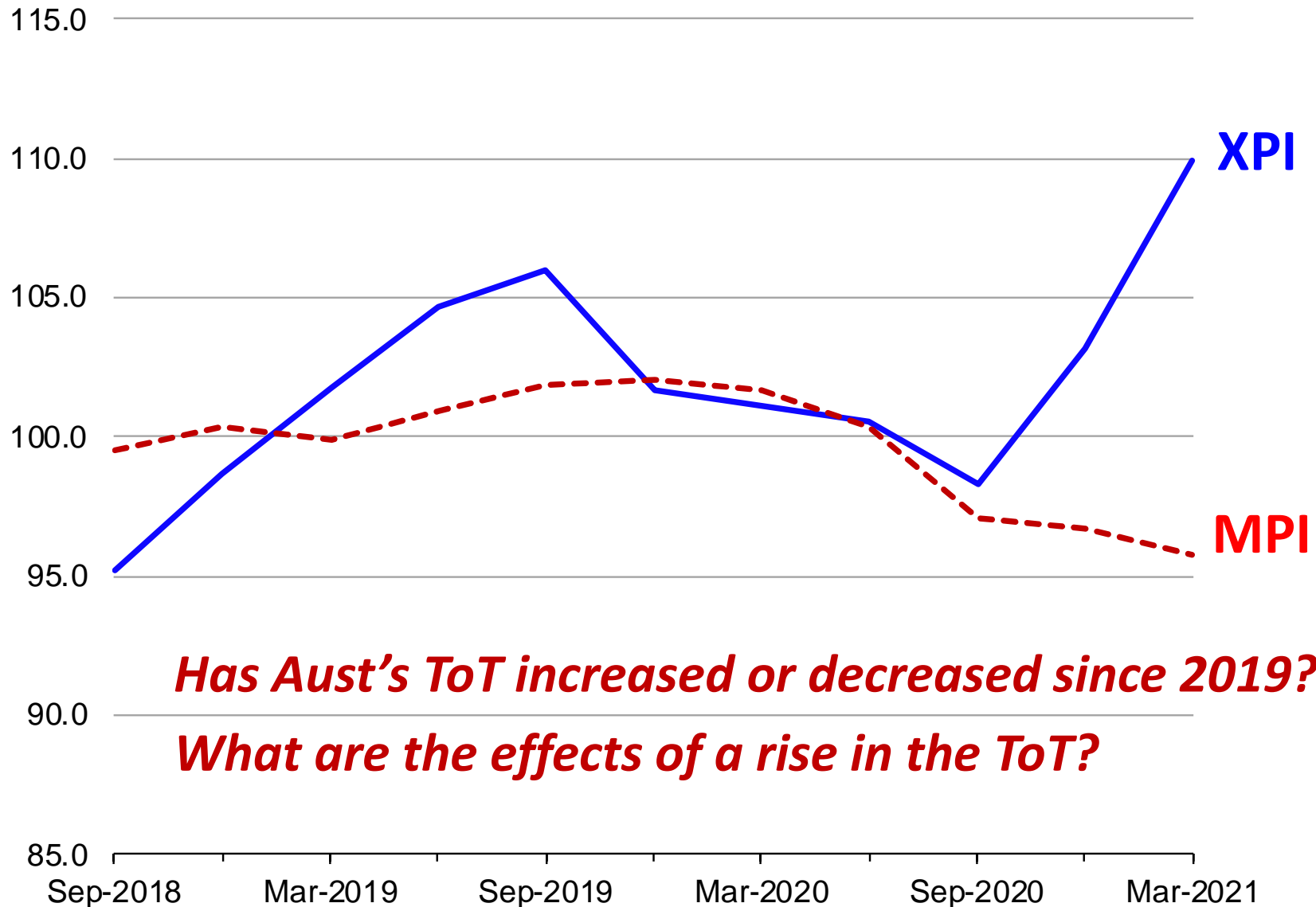
Terms of Trade

If Australia's terms of trade increase, then

i.   The trade balance __*increases*__

ii. Real GDP __*increases*__

iii. The AD curve shifts to __*right*__

iv. National income/living stds will __*increase*__

v.   The AUD will __*appreciate*__

Review

What would be the **most** likely effect on the Australian economy of an increase in iron ore prices (ceteris paribus)?
(a) A rise in the terms of trade and a decrease in the trade balance

(b) A rise in the terms of trade and an increase in the trade balance

(c) A fall in the terms of trade and a decrease in the trade balance

(d) A fall in the terms of trade and an increase in the trade balance

The Exchange Rate $A

- Changes in the value of the $A have important effects on the balance of payments and on economic activity

- You need to know

  – What has happened to the **TWI** & the **$AUD** during 2020-21

  – Factors driving the $A

  – Effects on the economy

- Use a model to show changes in the $A

$A1 = USD

S($A)

$0.75

D($A)

Q ($A)
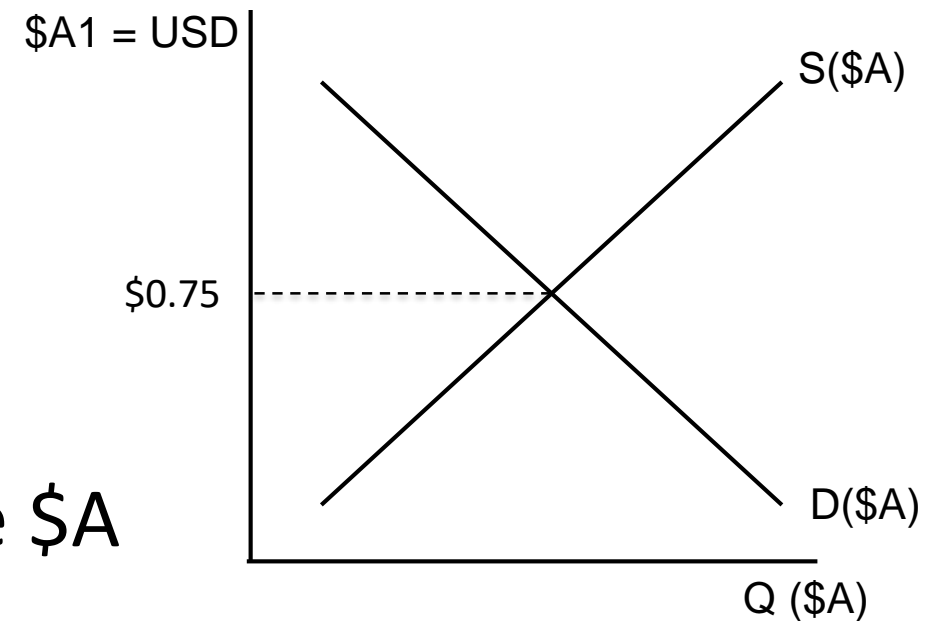
The Exchange Rate $A
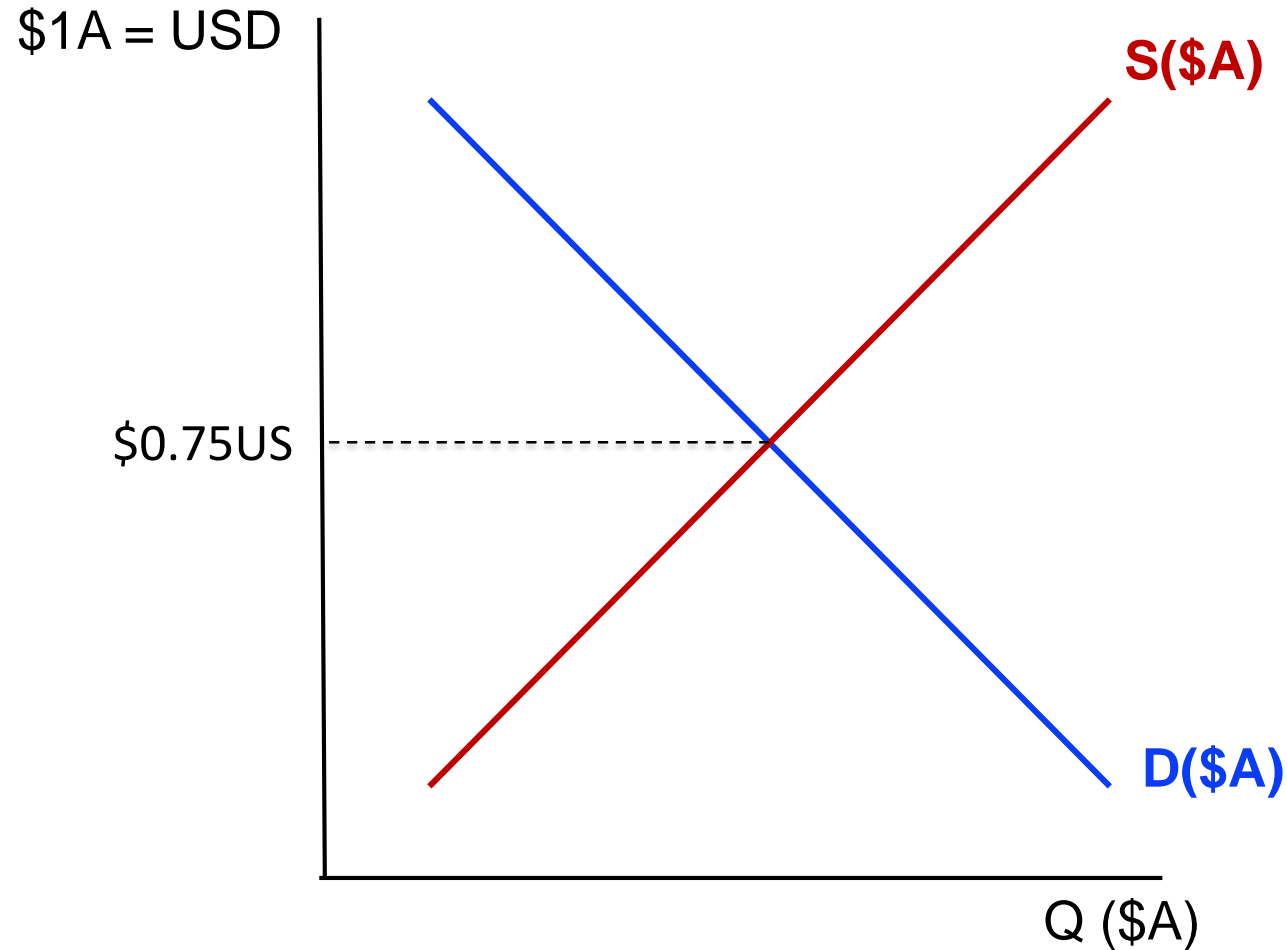
- **What determines the D($A)?**
  - *1. Exports*
  - *2. Foreign investment into Aust*

- **What determines the S($A)**
  - *1. Imports*
 - *2. Aust investment overseas*

Major Influences on the $A

- **Demand for Australian exports**
  - If China's economic growth slows, the $AUD will **depreciate**
  - Which curve will shift – D($A) or S(A)?
- **Commodity prices**
  - An increase in commodity prices will **appreciate** $AUD
  - Which curve will shift – D($A) or S(A)?
- **Interest rates**
  - If Australia's i/r differential decreases, the $A will **depreciate** Why?
  - Which curve will shift – D($A) or S(A)? **Both**

    D($A) will decrease & S($A) will increase

Review

Which of the following would occur if there was a decrease in US interest rates relative to Australia?

(a) There would be decreased supply of $AUD and the $AUD would depreciate.

(b) There would be increased supply of $AUD and the $AUD would appreciate.

(c) There would be decreased demand for $AUD and the $AUD would depreciate.

♥ There would be increased demand for $AUD and the $AUD would appreciate.

$AUD exchange rate
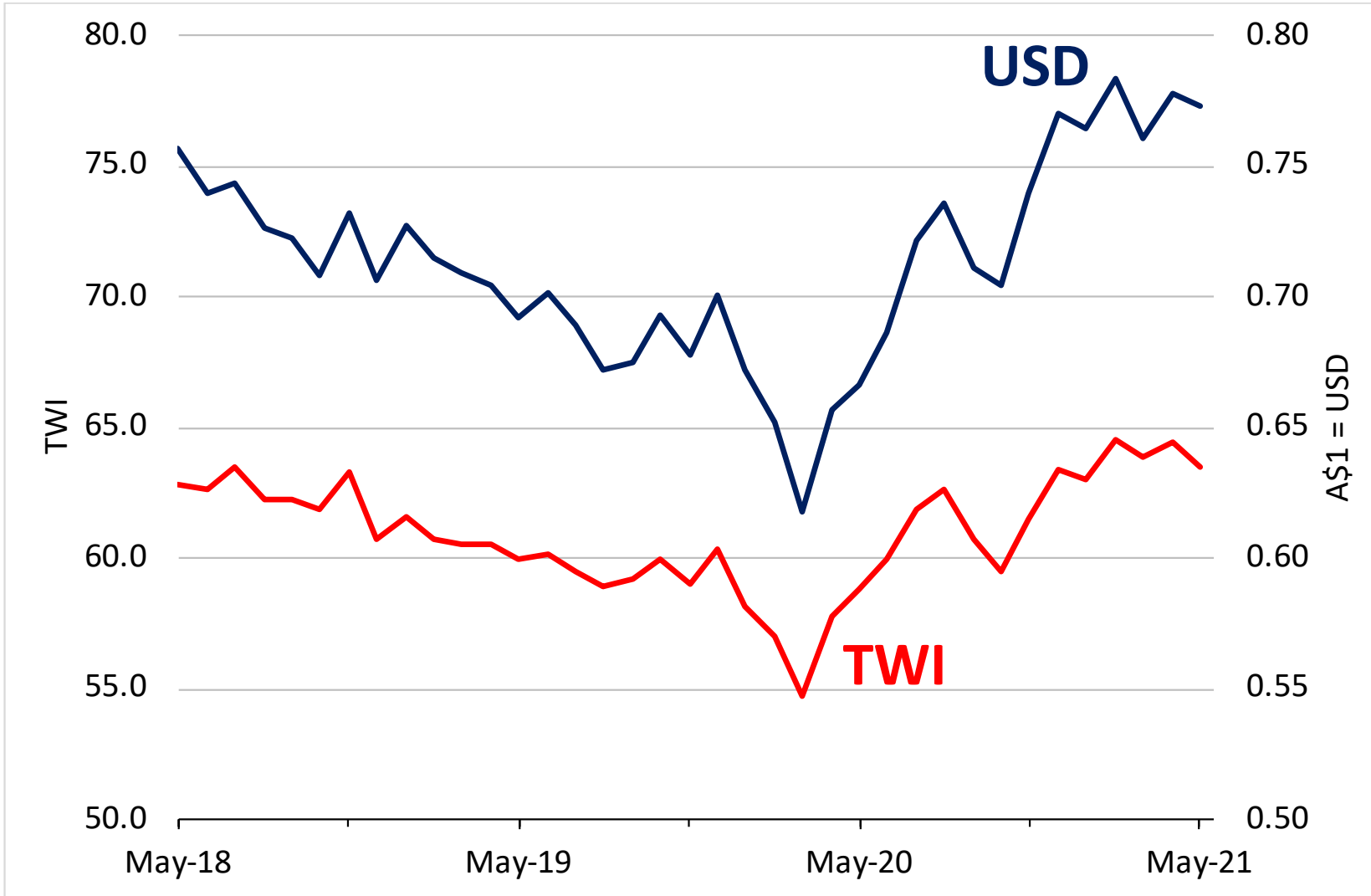
What are the 3 most important currencies in the TWI?

Which is more volatile – USD or TWI?

What has happened to the AUD during 2020-21?

Appreciated

Why?

Effects of an appreciation?

- An appreciation will reduce competitiveness because export prices _increase_ while import prices _decrease_

- What effect will an appreciation have on the **trade balance**? _decrease_

- What effect will an appreciation have on **the AD curve**? _decrease_

- What effect will an appreciation have on **real GDP**? _decrease_

- What effect will an appreciation have on **inflation**? _decrease_

The **Flow** of Foreign Investment

Key learning points

- Foreign investment & investment are ***different*** concepts
- A financial account surplus = ***net capital inflow***
- A financial account deficit   = ***net capital outflow***
- Foreign ***direct:*** new business, joint venture, >10% equity
- Foreign ***portfolio:*** purchase of shares, property, < 10% equity
- What are the income flows associated with foreign investment? ***Interest; dividends***

Portfolio/Direct

- Which is more stable? *Direct*
- Which is more speculative? *Portfolio*
- Which is more beneficial? *Direct*
- What are the **benefits** of FDI?

  1. Helped to fill the *I – S gap*
  2. Developed Aust's *mining sector*
  3. Boosts Aust's production & employment
  4. Brings new *technologies* increasing productivity
  5. Increases Australia's export income

The <u>Stock</u> of Foreign Investment

Key learning points

- The stock (accumulation) of foreign investment in Australia is total **foreign liabilities ($3,925 billion)**

- The stock (accumulation) of Australian investment overseas is total **foreign assets ($3,050 billion)**

- **Net foreign liabilities ($875 bn)**

    =   Foreign liabilities   –   Foreign assets

    = Net foreign debt + Net foreign equity
        ($1,140bn)   (-$265bn)

Australia's Net Foreign Liabilities

	Foreign Liabilities % GDP	Foreign Debt % GDP	Foreign Equity % GDP	Foreign Debt Private %	Foreign Debt Public %
Mar 2011	55	48	7	78	22
Mar 2021	44	58	-13	63	37

Key points:

- *Net foreign liabilities have been falling*

- *Foreign equity assets have been increasing*

- *The govt's share of foreign debt has increased*

Coffee time!

Unit 4: Macroeconomics

1. **The business cycle** **(s3)**
2. **The AE model & the multiplier**
3. **The AD & AS model**
4. **Economic policy objectives** **(s3)**
5. **Fiscal policy** **(s3)**
6. **Monetary policy** **(s3)**
7. **Structural change & _productivity_** **(s2)**

The Covid Pandemic

- The COVID-19 pandemic triggered the largest *contraction* in the Australian economy since the Great Depression of the 1930s and required an unprecedented monetary and fiscal policy *stimulus*.
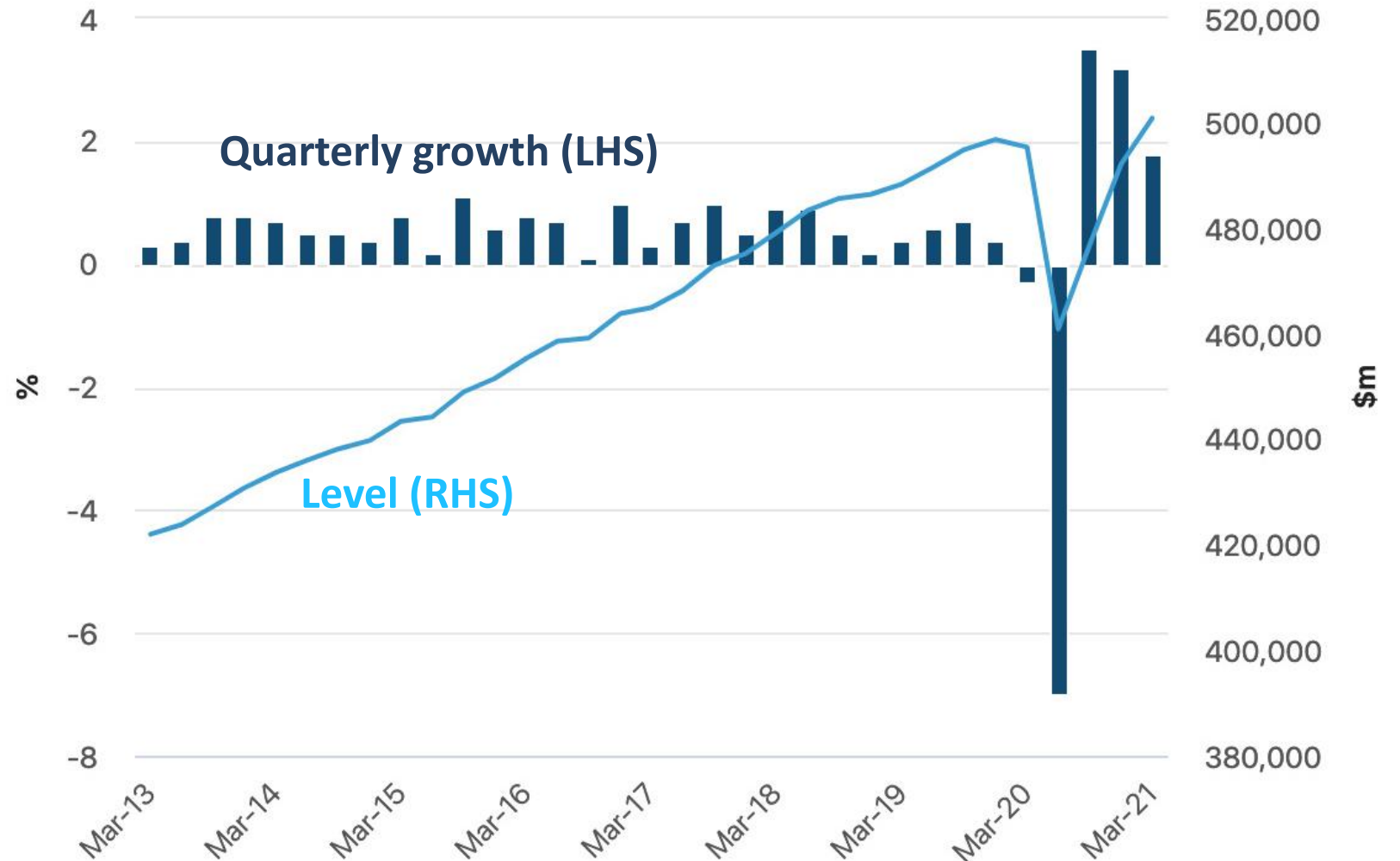
The Australian Economy – Real GDP
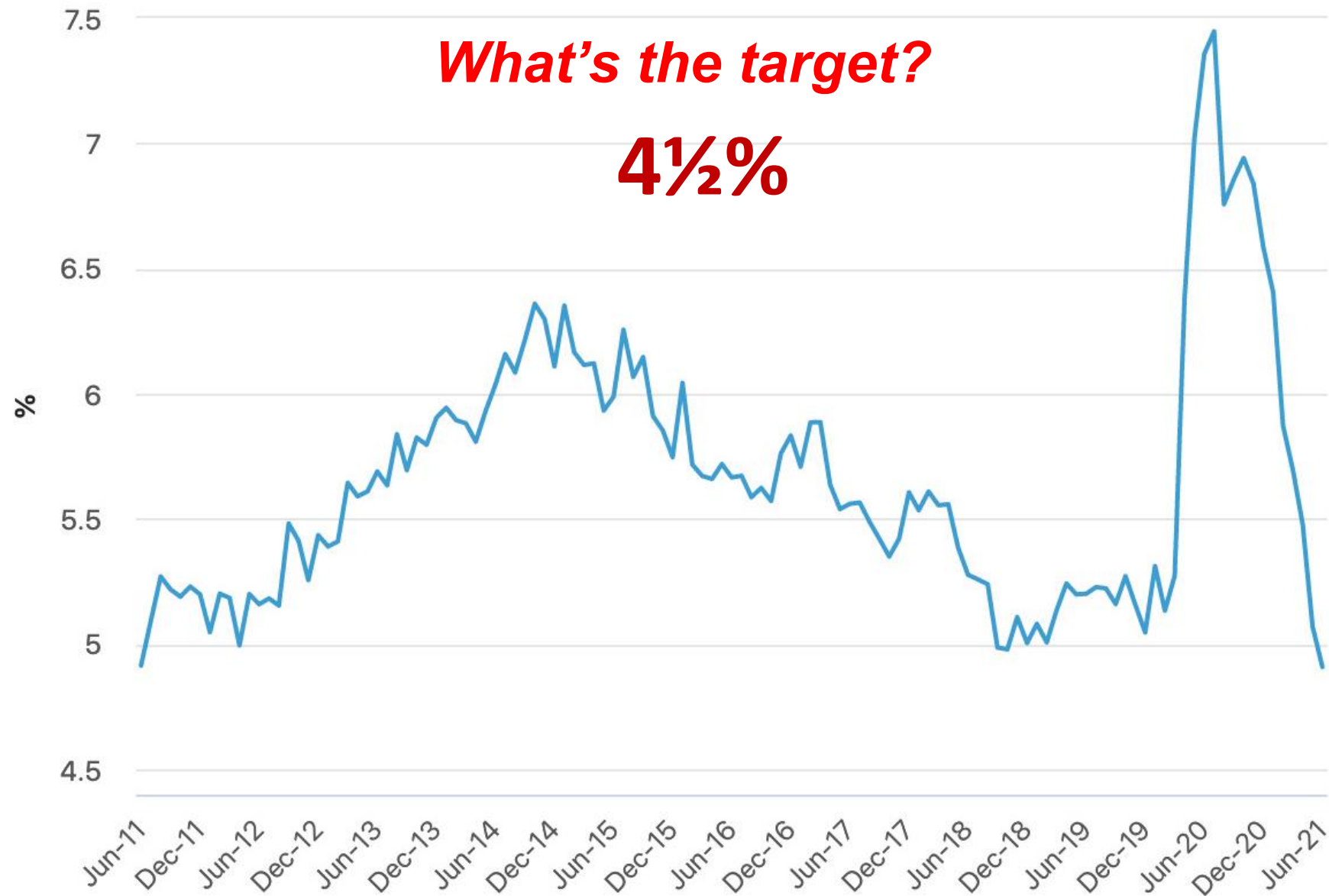
Annual growth rate
- *Dec 2020: -1%*
- *Mar 2021: +1%*
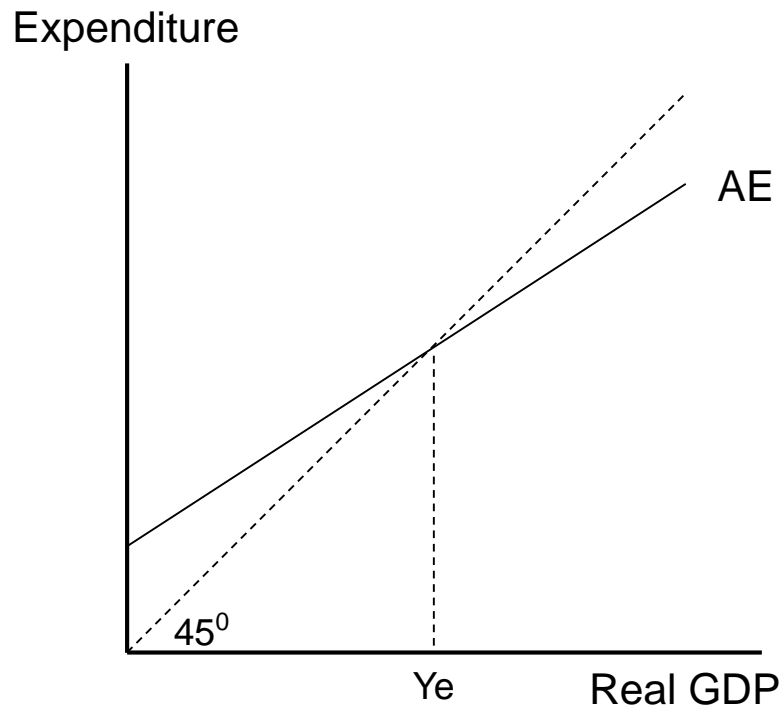
What is the target rate of GDP growth?

3½%

Quarterly growth (LHS)

Level (RHS)

Source: ABS

The Australian Economy - Unemployment

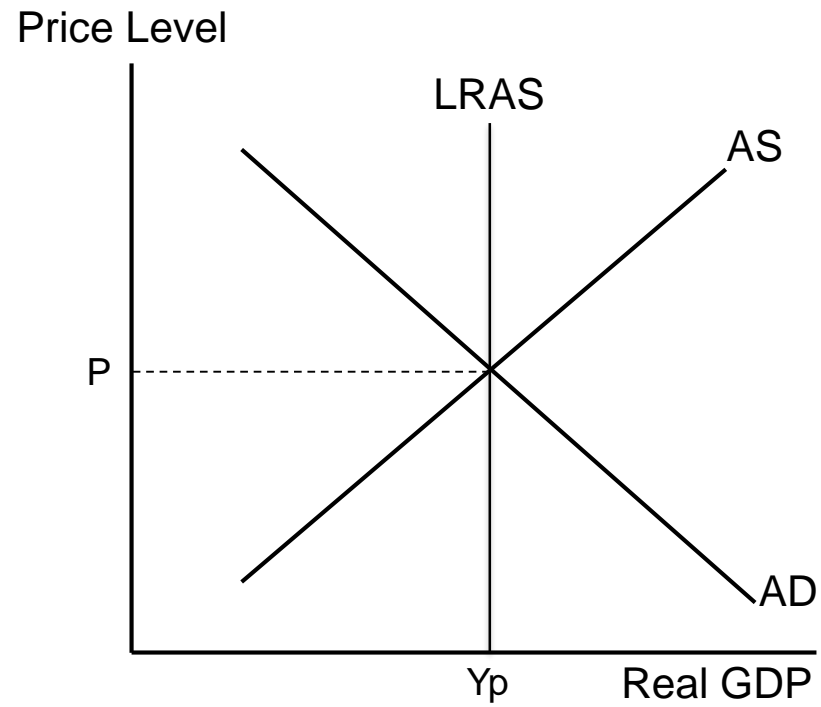**What's the target?**

4½%

Source: ABS

Unit 4 Macro Models

There are two key models:

AE MODEL

AD/AS MODEL

When should I use the models?

Very important – label the axes correctly

The AE Model

- Use this model for to explain **macro equilibrium** & the **multiplier**
- The **consumption function** is the building block of the AE model
- C = f (Y) – a rise in Y causes an increase in C (movement up along the C line)
- The slope of the consumption function = __***mpc***___
- The C function shifts when one of the other factors affecting consumption change e.g. wealth, consumer confidence, interest rates

Consumption Function

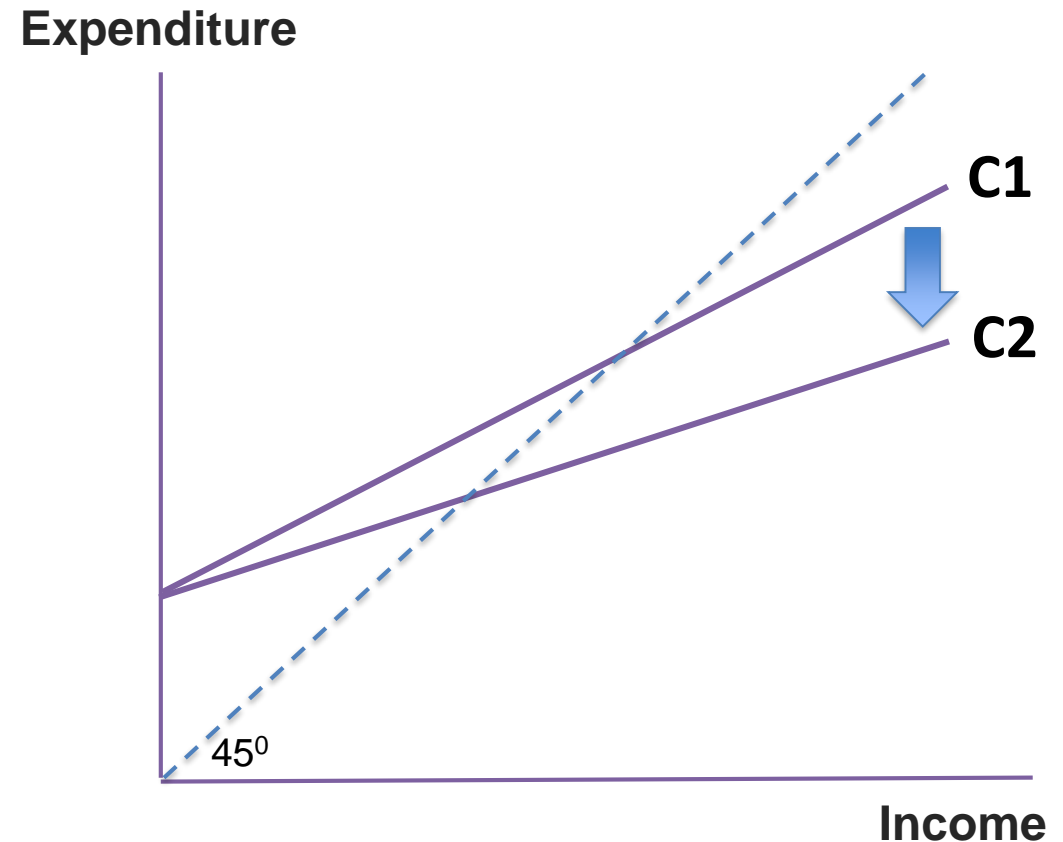A shift in the consumption function from C1 to C2 could be caused by

- _**increase**_ in wealth
- _**decrease**_ in interest rates
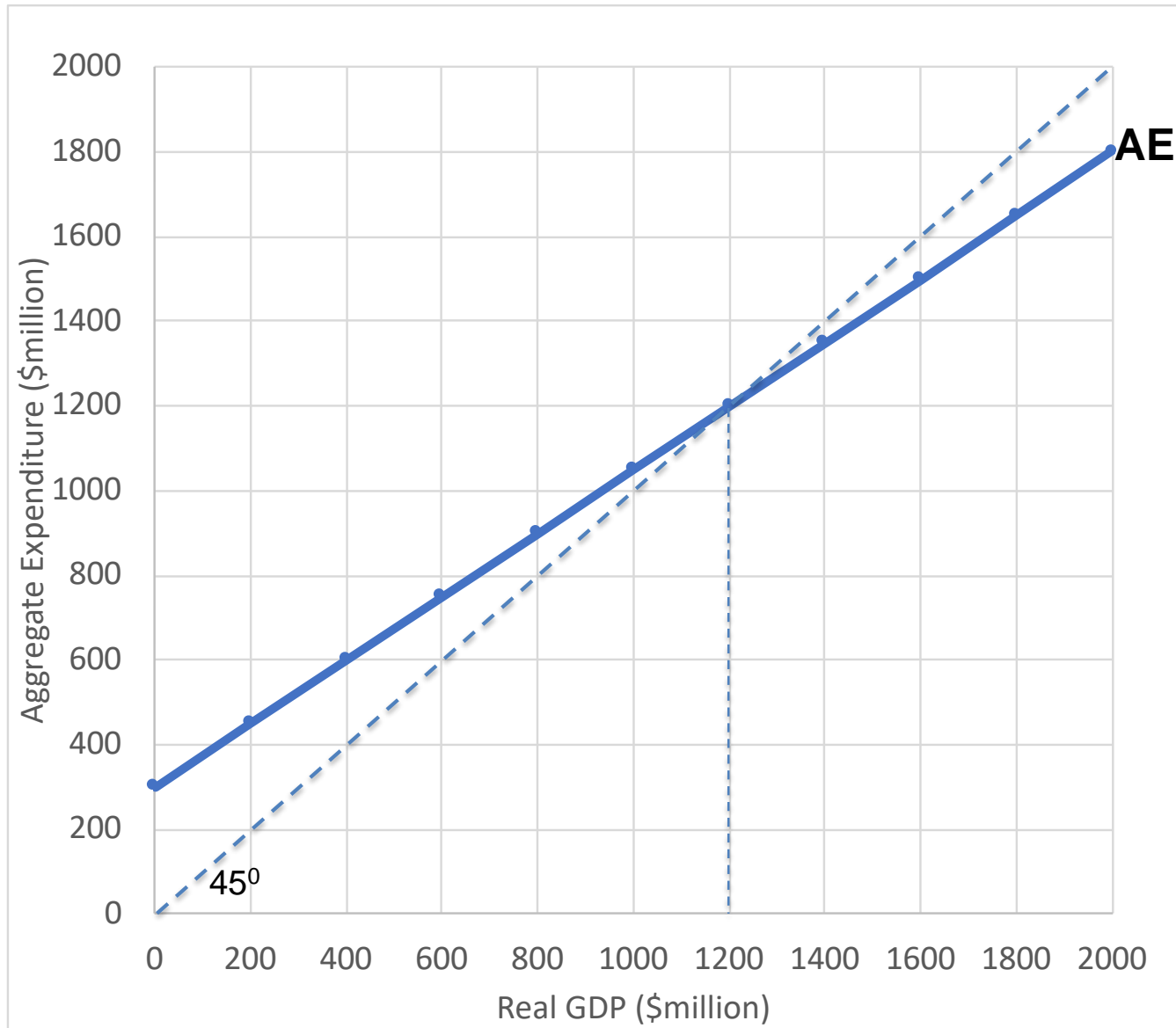- _**increase**_ in consumer confidence
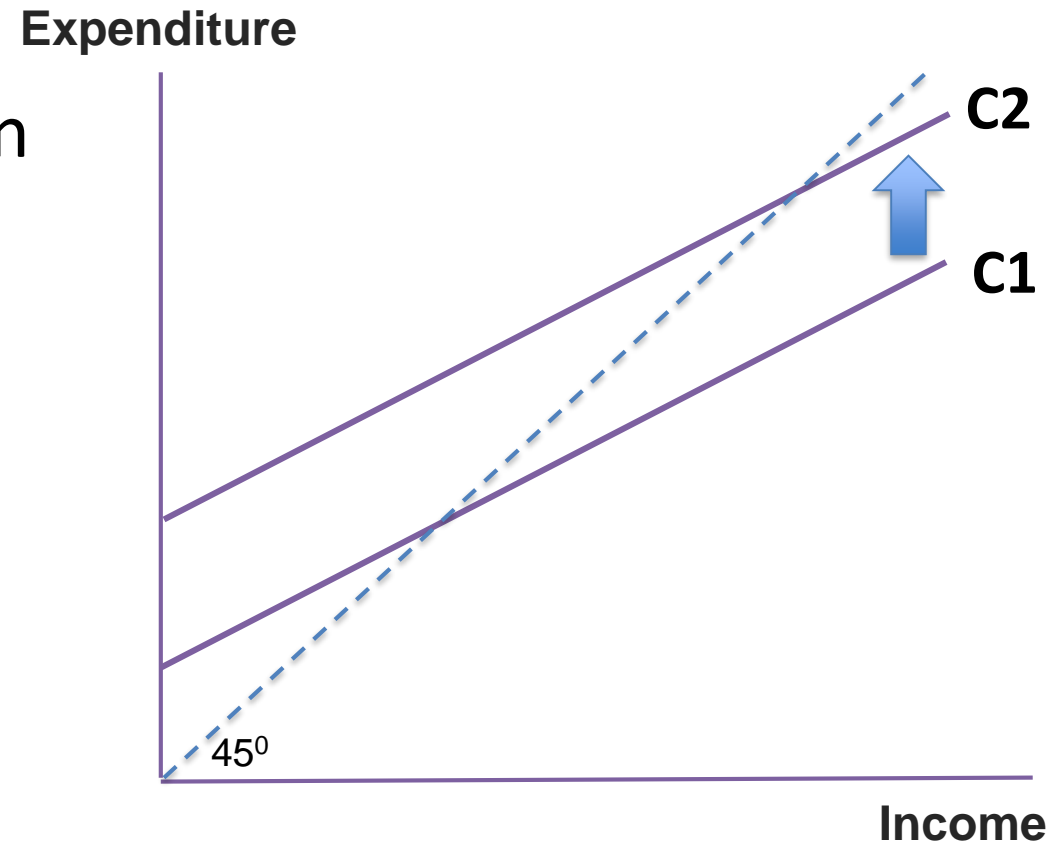
Consumption Function

A decrease in the slope of the consumption function from C1 to C2 represents

- a decrease in the *mpc* _____
- an increase in the mps *mps* _____
- a *decrease* in the size of the multiplier

The AE Model

What is autonomous expenditure? **$300m**

What is the equilibrium level of real GDP? **$1200m**

If Y = $1000m, what will happen to inventories? **Decrease**

What will happen to production?

What is the mpc? **¾ or 0.75**

What is the multiplier? **4**

If Yp = $2000 million, then govt should increase G by **$200m**

WACE   23%

Which of the following statements about the consumption function is correct?

(a) As disposable income rises, the marginal propensity to consume falls.

64% → (b) As disposable income rises, the marginal propensity to consume rises.

♥ As disposable income rises, the marginal propensity to consume does not change.

(d) As disposable income rises, the marginal propensity to save rises.

Review

How would each of the following affect the level of AE in Australia?

I. The covid pandemic   *Decrease*

II. The Chinese economy expands   *Increase*

III. The government cuts income taxes   *Increase*

IV. The RBA cuts the cash rate   *Increase*

V. Housing prices rise   *Increase*

VI. The AUD appreciates   *Decrease*

The Multiplier

- If spending increases by $10bn and GDP rises by $30bn then the multiplier = __**3**__

- The multiplier depends on the marginal propensity to consume: mpc = **$\Delta C/\Delta Y$**

- The formula for the multiplier (k) is

  k = $1/(1 - mpc)$ or k = $1/mps$

  e.g. if the mpc = 2/3 (0.67)

  Then k = 1/(0.33) = __**3**__

WACE 2020

Using the data in the table, which of the following is correct? The mpc is

(a) 0.75 and the multiplier is 4.

(b) 0.5 and the multiplier is 2.

30% (c) 0.75 and the multiplier is 1.33.

(d) 0.4 and the multiplier is 2.5.

Income	Consumption
120	90
140	105
160	120

WACE 2020

If the marginal propensity to consume is 0.8, an increase in investment of $100bn would cause income to

(a) rise by $100bn.
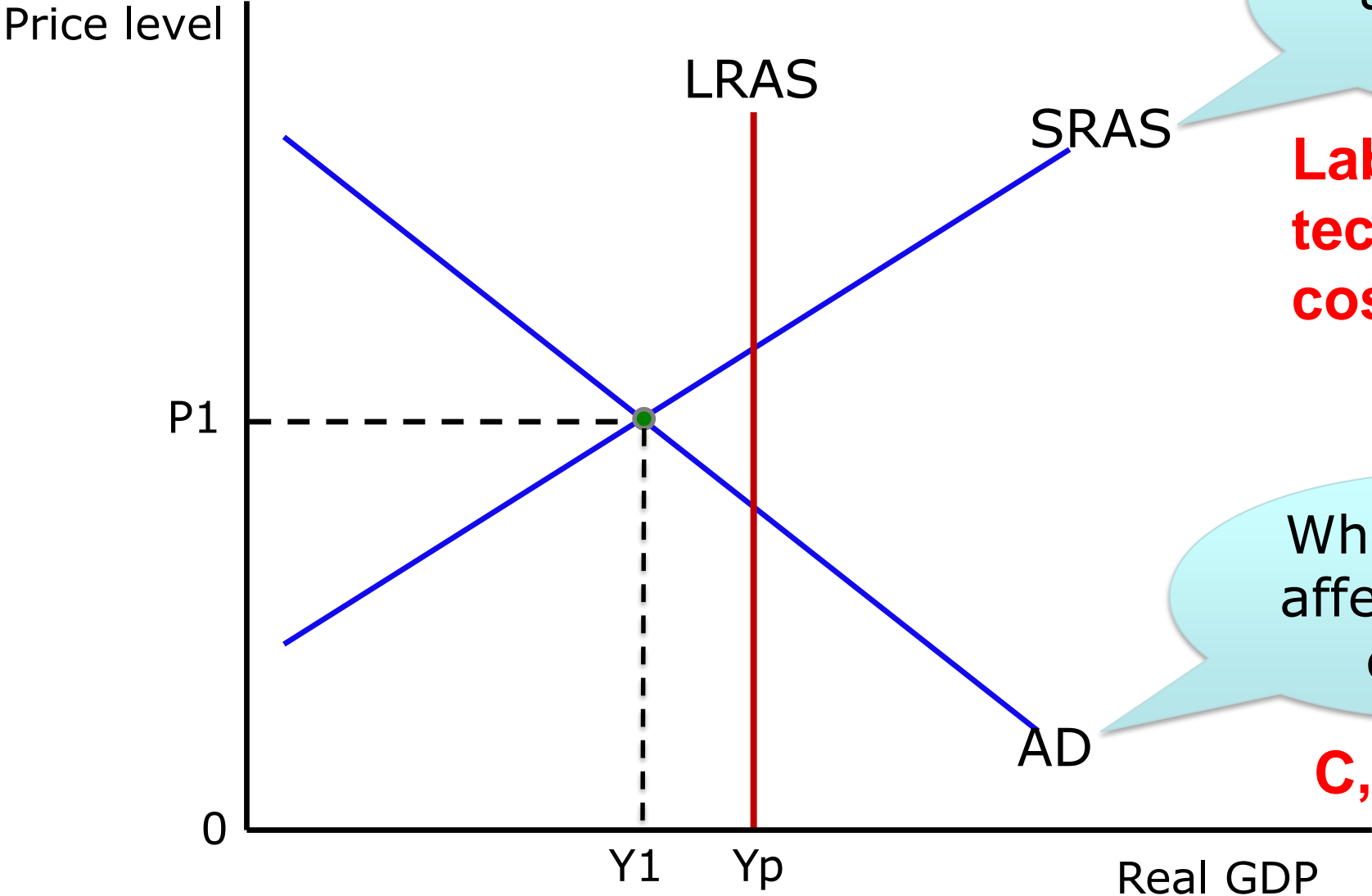
(b) rise by $500bn.

(c) fall by $80bn.

(d) fall by $20bn.

The AD/AS Model

- Best used for explaining the **business cycle** – for showing the economy growing above or below potential GDP
- Best for showing the effect of **economic policy & changes in productivity**
- ***What is the AD curve? What shifts the AD curve?***
- ***What is the AS curve? What shifts the AS curve?***

The AD & AS Curves

How would the following affect the AD/AS curves?

1. An increase in the labour force   *AS increases*

2. The terms of trade increase   *AD increases*

3. Bushfires destroy property   *AS decreases*

4. AUD appreciates   *AD decreases*

5. An increase in house prices   *AD increases*

6. A decrease in productivity   *AS decreases*

7. Govt cuts income taxes   *AD & AS increase*

8. Govt spending on infrastructure   *AD & AS increase*

WACE

Which of the following will shift the aggregate supply (AS) curve will to the left?

(a) An increase in interest rates

(b) An increase in imports

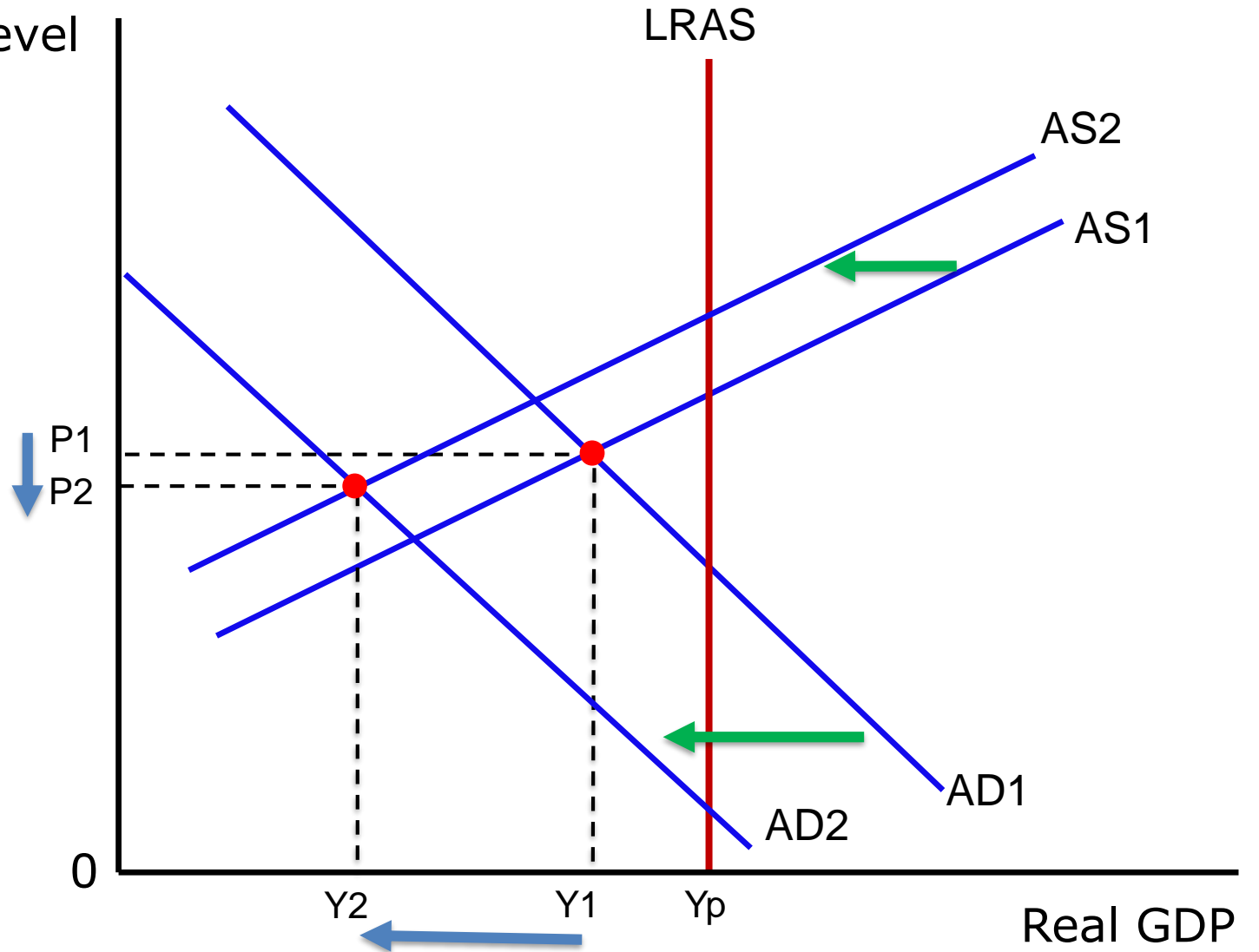(c) An increase in productivity

An increase in energy prices
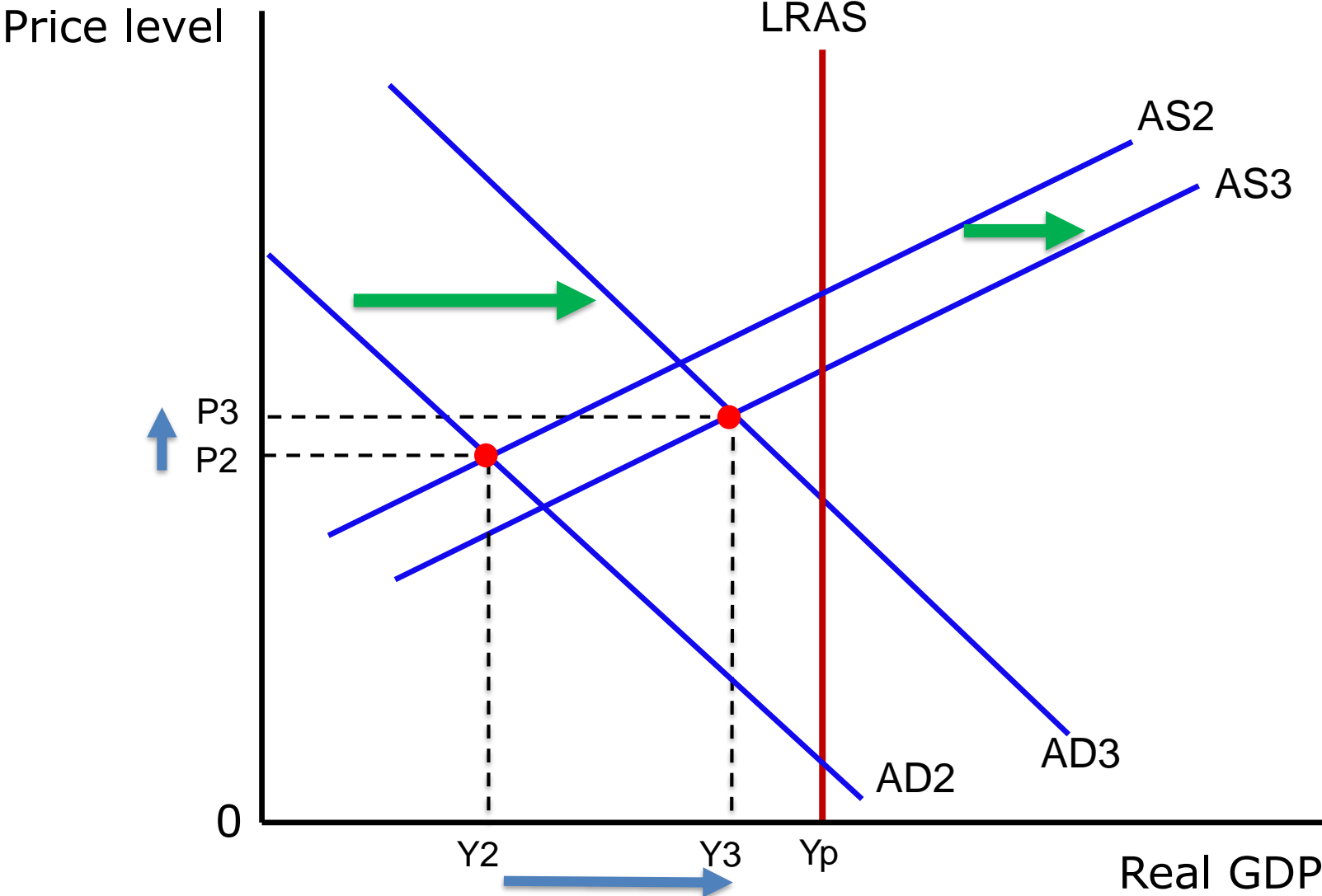
Economic Objectives

- What are the *five* economic objectives of the government?

- What are the *three* policy objectives of the RBA?

- Do I know the time lags of economic policy?

  - *Recognition* (data) lag   **Same**

  - *Implementation* (decision) lag   **FP slow, MP quick**

  - *Effect* (impact) lag   **FP quick, MP slow**

- How are these lags different for fiscal/monetary policy?

Monetary Policy

- What is '*conventional*' monetary policy?

  ➢ Changing the *cash rate* rate to affect interest rates in order to affect private spending – consumption investment & net exports

  ➢ In 2020 the cash rate was reduced from 0.75% to **0.1%**

  ➢ The '*transmission mechanism*'

    What are the four channels?

Monetary Policy

Cash Market Rates
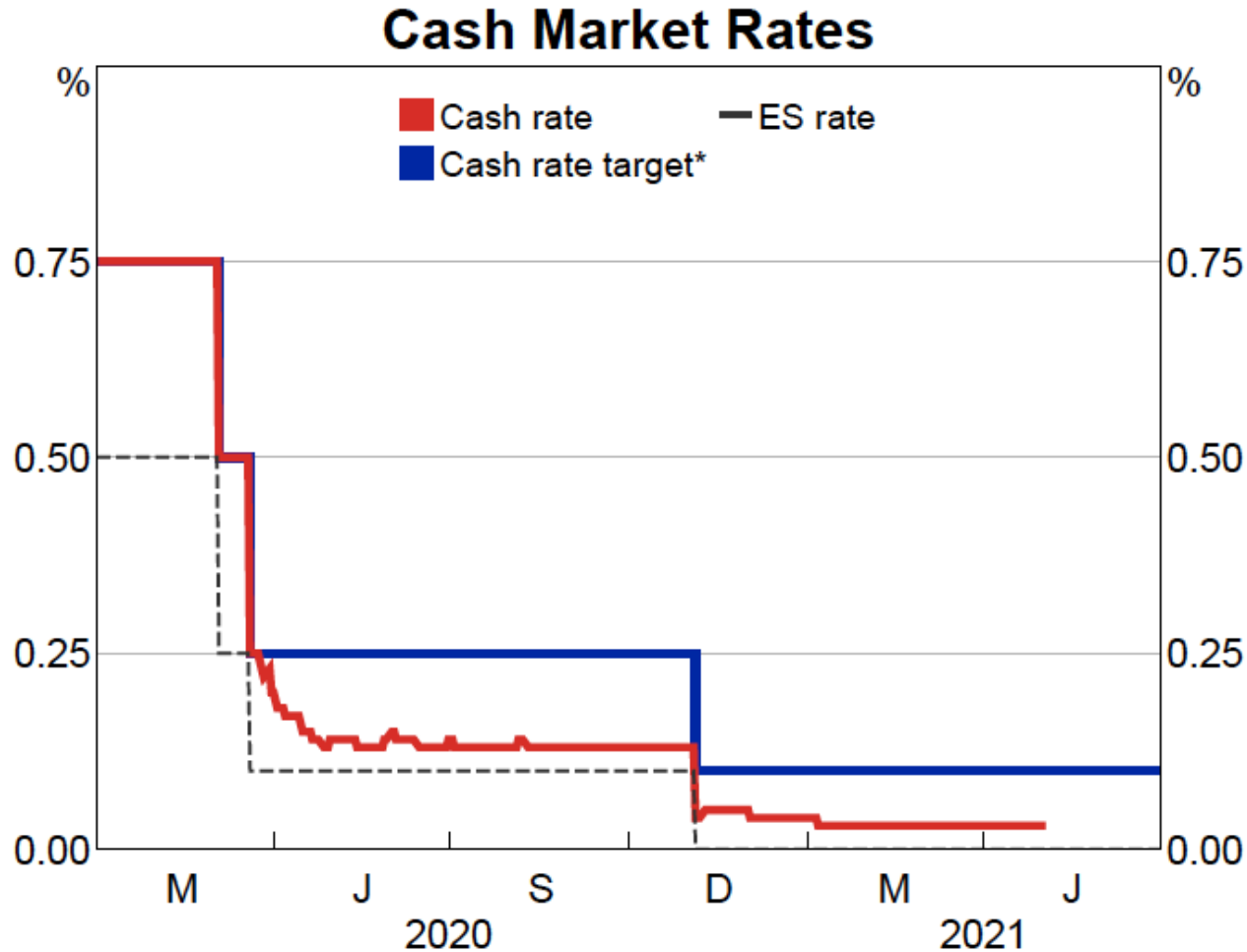
Reducing the cash rate decreases interest rates which

1. encourages new *borrowing*

2. increases *cash flow* of existing borrowers

3. increases *asset prices*

4. lowers the *$AUD*

C, I & NX should all increase

Monetary Policy

- What is '*unconventional*' monetary policy?

1. *Forward guidance* – a commitment by the RBA to keep interest rates low for 'as long as it takes'

2. *Quantitative easing* – the RBA purchases a large quantity of govt bonds form the private sector to increase liquidity & reduce longer term interest rates

Monetary – Strengths/Weaknesses

- What are *THREE* strengths of monetary policy?
- In which part of the business cycle will monetary policy be powerful? *Expansion/boom*
- Which policy lag is short for monetary policy? *Decision*
- What are *THREE* weaknesses of monetary policy?
- In which part of the business cycle is monetary policy less effective? *Recession*
- Which policy lag is long for monetary policy? *Effect*

Fiscal Policy

- What are the tools of fiscal policy?

- Important to know the difference between . . .

  – planned & actual budget outcome

  – *discretionary policy & automatic stabilisers*

- What happened to fiscal policy in 2019-20?

  – Planned budget surplus turned into a large budget *deficit* _____

- The budget deficits for 2020-21 & 2021-22 will be the largest on record. Why?

Discretionary or Automatic

Are the following examples of discretionary or automatic fiscal policy?

1) Announcement of 'jobkeeper' allowance   *Discretionary*

2) An increase in welfare spending because of higher unemployment   *Automatic*

3) An increase in spending on infrastructure during a contraction   *Discretionary*

4) A decrease in personal income tax receipts during a contraction   *Automatic*

Automatic Stabilisers

- Automatic fiscal stabilisers have an important effect on the budget balance

- When the economy contracts the budget balance will fall & automatically shift to a __*deficit*__

- Why? Because G will __↑__ & T will __↓__

- When the economy expands, the budget balance will rise & automatically shift to a __*surplus*__

- Why? Because G will __↓__ & T will __↑__

Fiscal Policy

	Receipts $b	Payments $b	Underlying cash balance $m
2018-19	477.4	478.1	-0.7
2019-20	464.4	549.6	-85.2
2020-21 (e)	499.8	660.8	-161.0
2021-22 (e)	482.1	588.7	-106.6
2022-23 (e)	494.0	593.3	-99.3

Effect of Covid

- Why do the planned budget deficits get smaller after 2020-21? *Automatic stabilisers*
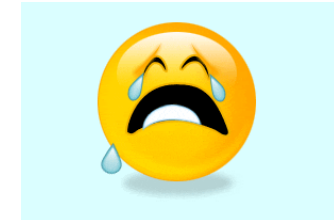
Fiscal Policy

- How does the government finance a budget deficit?

- By ___*borrowing*___

- How? ___*selling new govt bonds*___

- Main methods:

  1. Borrow from the **RBA**
  2. Borrow from **domestic residents**
  3. Borrow from **overseas**
  4. Sell govt assets

Which of these is most important?

Budget Deficits

- Budget deficits lead to increased **government debt**

- Is this a problem?

- The '**negatives**'

  – *Opportunity cost* of interest payments

  – Possible *high inflation?*

- The *'positives'*

  – *Saves the economy* from severe recession & high unemployment

  – Record *low interest rates*

Fiscal – Strengths/Weaknesses

- What are *THREE* strengths of fiscal policy?

- In which part of the business cycle will fiscal policy be powerful? *Contraction/recession*

- Which policy lag is short for fiscal policy? *Effect*

- What are *THREE* weaknesses of fiscal policy?

- In which part of the business cycle is fiscal policy constrained? *Boom*

- Which policy lag is long for fiscal policy? *Decision*

Productivity

- Productivity is NOT production – It is GDP per worker or GDP per hour worked *(labour productivity)*

- Why is productivity so important?

  – It is the most important determinant of economic growth and <u>rising living standards</u>

- An increase in productivity shifts the AS curve to the *right* increasing *real GDP* & reducing the *price level*

Productivity

- **Labour productivity** consists of:

  i) *capital deepening* – increasing the <u>**K/L ratio**</u>

  ii) *multifactor productivity (MFP)* – the contribution of *technology* , advances in **knowledge**

- **Measures to improve productivity**
  - Increasing **physical capital** *(private & public investment)*
  - Investment in **human capital** *(education & training)*
  - Incentives for **innovation & research & development**

Questions

Best wishes for your exams