## Sydney Grammar School <br> 

## 2020 TRIAL

## HSC ECONOMICS

## Candidate number:

Date:
Total Time:
Total Marks:
Weighting:
Outcomes Assessed:

Fri 14 August (AM)
3 hours \& 5 minutes 100
$50 \%$ of total assessment mark
All

## Checklist:

Each boy should have the following:
$\square$ Question Paper
$\square$ Answer Booklet
$\square 2$ Writing Booklets

## General Instructions:

- Reading Time: 5 minutes
- Working Time: 3 hours
- Write using black pen
- Write your candidate number above and on the top of the Answer Booklet and all Writing Booklets used
- Put your Question Paper and all Writing Booklets inside your Answer Booklet and hand up in one bundle


## Structure of Paper and Specific Instructions:

- Section I: Multiple Choice (20 marks)

Answer all questions in the Answer Booklet. Select the alternative A, B, C or D that most fully and correctly answers the question

- Section II: Short Answers (40 marks)

Answer all parts of the 4 questions in the Answer Booklet

- Section III: Stimulus Extended Response (20 marks)

Attempt one question from this section in a Writing Booklet. Answer this question after carefully reading the stimulus material

- Section IV: Extended Response (20 marks) Attempt one question from this section in a Writing Booklet
- Board approved calculators may be used


## SECTION I: MULTIPLE CHOICE <br> 20 marks <br> Attempt ALL questions <br> Select the alternative that best answers the question Mark your answers on the sheet provided in the ANSWER BOOKLET Spend no more than 35 minutes on this section

1. Which of the following is not a typical characteristic of a developing economy?

A Dependence on agricultural production
B Weak political and economic institutions
C Reliance on foreign aid
D Low level of inequality
2. In terms of Australia's free trade agreements, which one of the following is structurally different to the others?

A ANZ CERTA
B AANZFTA
C A-US FTA
D CHAFTA
3. This graph represents the Australian economy in 2017/18. What does it show?


A Industrial production
B Composition of imports
C Composition of exports
D Composition of the Balance of Goods \& Services
4. Which of the following international organisations has an aim to reduce the rate of extreme poverty to less than $3 \%$ of the world's population by 2030 ?

A International Monetary Fund
B World Trade Organisation
C World Bank
D Organisation for Economic Cooperation and Development

Questions 5 \& 6 are based on the graph below, showing Australia's Terms of Trade:

5. Which of the following is generally true for the 2011 - 2014 period?

| A | Export prices have fallen relative to import prices | Terms of Trade has risen |
| :--- | :---: | :---: |
| B | Import prices have risen relative to export prices | Terms of Trade has fallen |
| C | Export prices have risen relative to import prices | Terms of Trade has risen |
| D | Import prices have fallen relative to export prices | Terms of Trade has fallen |

6. Which of the following statements is incorrect?

A The gains from the Mining Boom Mark I (Price Phase) were helped by the sharp rise in the Terms of Trade
B Since the last peak shown, Australia has been able to buy fewer imports for a given level of exports
C Post GFC there was a global recovery, sparking an initially higher Terms of Trade
D The falling terms of trade after 2011 shows that the quantity of exports sold rose more than the quantity of imports purchased
7. How can a government finance a budget deficit?

A Reduce government expenditure
B Increase company taxes
C Sell Commonwealth Government Securities
D All of the above
8. The following table shows the change in the value of the United States dollar:

| Date | United States Dollar | Australian Dollar |
| :--- | :---: | :---: |
| January 2020 | 1 | 1.3 |
| March 2020 | 1 | 1.5 |

Which of the following theoretical statements is correct?
A Imported inflation into America will fall
B The volume of American exports to Australia will rise
C American investment into Australia will fall
D The Australian Dollar value of Australian debts denominated in US $\$$ will fall
9. The following international flows have been measured in an open economy:

| Flow | Australian \$ (Millions) |
| :---: | :---: |
| Capital \& Financial Account | +45 |
| Net Income (Primary \& Secondary) | -25 |
| Net Errors \& Omissions | -5 |
| Net Services | +5 |

Which of the following measurements is also correct?

|  | Flow | Australian \$ (Millions) |
| :---: | :---: | :---: |
| A | Net Exports | +20 |
| B | Balance of Trade | +15 |
| C | Exports | -10 |
| D | Balance of Goods \& Services | -15 |

10. The following graph represents a model of a 3 sector economy's income and expenditure patterns:


By how much does income increase between Ye and Ye 1

A 300
B 60
C 200
D 75
11. The following graphs represent the demand (MB) and supply (MC) schedules for two goods, good (A) and good (B) with the social benefits \& costs represented by MSB \& MSC respectively:

(B)


What combination of policies would ensure that the social optimum is achieved in both markets?

|  | GOOD (A) | GOOD (B) |
| :--- | :---: | :---: |
| A | Govt restricting production | Govt encouraging production |
| B | Govt legislating for a free market | Govt legislating for a free market |
| C | Subsidies to the producers | Indirect tax on the good |
| D | Banning imports of the good | Reducing the GST on the good |

12. The following table represents flows in a five sector economy over three years:

|  | Year 1 | Year 2 | Year 3 |
| :---: | :---: | :---: | :---: |
| Income | 100 | 200 | 350 |
| Exports | 20 | 30 | 30 |
| Govt Expenditure | 20 | 10 | 30 |
| Investment | 10 | 15 | 50 |
| Consumption | 50 | 150 | 250 |
| Imports | $?$ | $?$ | $?$ |

In which year(s) do net exports provide the greatest nominal injection?
A Year 1
B Year 2
C Year 3
D Years 1 and 3 equally
13. According to traditional crowding out theory, which of the following is regarded as the most likely negative consequence of governments running successively bigger budget deficits over time, ceteris paribus?

A Worsening environmental sustainability
B Higher domestic interest rates
C Lower Current Account Deficits
D Higher inflation
14. If the government budgets for a surplus and there is an unexpected rise in the level of economic activity, which of the following is most likely to occur, ceteris paribus?

| A | Higher tax receipts | Rise in the structural component of the budget surplus |
| :--- | :---: | :---: |
| B | Higher tax receipts | Fall in the cyclical component of the budget surplus |
| C | Greater government expenditure | Fall in the structural component of the budget surplus |
| D | Lower government expenditure | Rise in the cyclical component of the budget surplus |

15. In the following diagram, DD and SS represent the demand and supply for cars:


If a subsidy of $\$ 10$ per unit were paid to producers, shifting the supply curve from SS to S1S1, what would happen to the price of cars, ceteris paribus?

A The price would remain the same
B The price would fall by $\$ 10$
C The price would fall by more than $\$ 10$
D The price would fall by less than $\$ 10$
16. If the Reserve Bank of Australia believes that the overnight money market is likely to deliver a cash rate below the target, what would it do?

A Sell Commonwealth Government Securities to reduce liquidity in the market
B Sell Commonwealth Government Securities to increase liquidity in the market
C Buy Commonwealth Government Securities to reduce liquidity in the market
D Buy Commonwealth Government Securities to increase liquidity in the market
17. Which of the following statements is true regarding the nature of goods?

A Goods with positive externalities are usually over-produced by the free market
B Goods which are rival and excludable are best provided by the government
C Non-rival and non-excludable goods are associated with the issue of free riding
D Private property rights do not exist if the good has negative externalities
18. The following diagram shows changes in the demand for and supply of Australian dollars in the foreign exchange market:


Assuming a floating exchange rate, which of the following would most likely not be responsible for the change shown?

A More foreigners holidaying in Australia
B Higher interest repayments on non-A\$ loans borrowed from overseas by Australians
C Higher dividends received by foreigners from their Australian equities
D Increased fears of a slowdown in the Australian economy
19. Which of the following combinations is generally regarded as causes of low levels of national income?

|  | Global Factor | Domestic Factor |
| :---: | :---: | :---: |
| A | Weak entrepreneurial culture | Phantom aid |
| B | High levels of agricultural protection | Highly skilled labour force |
| C | Tied aid | Poor access to capital |
| D | Sustainable Development Goals | High levels of foreign debt |

20. Consider the following table before answering this question.

| Year | Money GDP (\$ bn) | CPI |
| :---: | :---: | :---: |
| 1 | 1000 | 100 |
| 2 | 1200 | 105 |
| 3 | $?$ | 115 |

If Real GDP in year 3 was $\$ 1500 \mathrm{bn}$, which of the following combinations is correct?

| A | Eco Growth in Year 2 is 20\% | Real GDP in Year 1 is \$1000 |
| :---: | :---: | :---: |
| B | Money GDP in Year 3 is \$1725 | Eco Growth in Year 3 is 31.2\% |
| C | Eco Growth in Year 2 is $14.3 \%$ | Money GDP in Year 3 is \$1304 |
| D | Real GDP in Year 2 is \$1143 | Eco Growth in Year 3 is 16.9\% |

## END OF SECTION I

## SECTION II: SHORT ANSWERS

## 40 Marks

The questions for Section II are contained in the ANSWER BOOKLET
Please complete your answers in the spaces provided
Marks for each part of the question are as indicated Spend no more than 1 hour and 15 minutes on this section

# SECTION III: STIMULUS EXTENDED RESPONSE 20 marks <br> Attempt EITHER Question 25 OR Question 26 Answer your chosen question in a WRITING BOOKLET Allow at least 35 minutes for this question 

In your answer you will be assessed on how well you:

- Demonstrate knowledge and understanding relevant to the question
- Use the information provided
- Apply relevant economic terms, concepts, relationships and theory
- Present a sustained, logical and cohesive response


## EITHER

25. Discuss the effectiveness of fiscal and monetary policies in terms of achieving their objectives in Australia.

## Last 10 Years

Underlying Cash Balance per cent of GDP


Last 10 Years - Australia's Cash Rate Target (\%)


## OR

26. Discuss the use of environmental policies in terms of promoting ecologically sustainable development in Australia.



# SECTION IV: EXTENDED RESPONSE 20 marks <br> Attempt EITHER Question 27 OR Question 28 <br> Answer your chosen question in a separate WRITING BOOKLET Allow at least 35 minutes for this question 

In your answer you will be assessed on how well you:

- Demonstrate knowledge and understanding relevant to the question
- Apply relevant economic terms, concepts, relationships and theory
- Present a sustained, logical and cohesive response


## EITHER

27. Examine the impacts of globalisation on the global economy.

## OR

28. Examine the factors influencing the changing nature of Australia's external stability.

Candidate Number.

## 2020 TRIAL HSC ECONOMICS ANSWER BOOKLET FOR SECTIONS I \& II SECTION I: MULTIPLE CHOICE

(1) $\mathrm{A} \quad \mathrm{B}$
C D
(11) A B
B C
D
(2) A
B C D
D
(12) A B
B
C D
(3) $\mathrm{A} \quad \mathrm{B}$
C D
(13) A B
B
C D
(4) A B C D
D
(14) $A$ B C D
(5) $\mathrm{A} \quad \mathrm{B} \quad \mathrm{C} \quad \mathrm{D}$
(15) A B
B
C D
(6) $\mathrm{A} \quad \mathrm{B} \quad \mathrm{C} \quad \mathrm{D}$
(16) A B C D
(7) $\mathrm{A} \quad \mathrm{B} \quad \mathrm{C} \quad \mathrm{D}$
(17) A
B
C D
(8) $\mathrm{A} \quad \mathrm{B} \quad \mathrm{C} \quad \mathrm{D}$
(18) $A$ B C D
(9) $\mathrm{A} \quad \mathrm{B} \quad \mathrm{C} \quad \mathrm{D}$
(19) A B
B
C D
(10) $A$ B C D
(20) A
B C
D

## SECTION II: SHORT ANSWERS

40 marks
Marks for each part of the question are indicated
Answer the questions in the spaces provided below Spend no more than 1 hour and 15 minutes on this section

## Question 21

(a) Using the information in the table below, calculate the rate of unemployment. (1 mark)

| Working Age Population | Unemployed | Hidden Unemployed |
| :---: | :---: | :---: |
| 100 m | 10 m | 35 m |
| Full-Time Employed | Part-Timed Employed | Home Duties |
| 40 m | 10 m | 5 m |

(b) Using the Consumer Price Index information in the table below, calculate the rate of inflation in Year 3.
(1 mark)

| Year 1 | Year 2 | Year 3 |
| :---: | :---: | :---: |
| 110 | 120 | 140 |

(c) Why is there a conflict between achieving low inflation and low unemployment? (2 marks)
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## Question 21 continued

(d) Outline the concept of NAIRU.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
(e) Explain the different approaches taken by macroeconomic policies and microeconomic reform in terms of reducing unemployment. (4 marks)
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## Question 22

The following diagram represents the change in income distribution (Lorenz Curve A to Lorenz Curve B) for a particular nation and is needed to answer parts (a) and (b) on the next page:


## Question 22 continued

(a) What has happened to this nation's income distribution?
$\qquad$
(b) What has happened to this nation's Gini coefficient?
$\qquad$
(c) Distinguish between the concepts of income and wealth.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
(d) Explain the likely impact on Australia's income distribution following a rise in the rate of the Goods and Services Tax.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## Question 22 continued

(e) Account for the difference between wealth held by males and females in Australia.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## Question 23

(a) On the graph below, draw and label the impact of a successful privatisation program by the Australian government.

(b) Outline the 3 efficiencies that microeconomic reforms are aimed at.
i). $\qquad$
$\qquad$

## Q23 (b) continued

ii)
iii) $\qquad$
$\qquad$
(c) Using an Australian example, explain how deregulation has been used as a microeconomic reform.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
(d) Explain how competition policy has been used in Australia as a microeconomic reform.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## Question 24

(a) Outline ONE benefit and ONE cost of using tariffs to protect domestic industries.

Benefit: $\qquad$
$\qquad$
$\qquad$

Cost: $\qquad$
$\qquad$
$\qquad$
(b) Explain the likely effects of a lower Australian Dollar on Australia's Balance of Payments.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## Question 24 continued

(c) With reference to ONE economy other than Australia, how has the government responded to fluctuations in the international business cycle?

## Chosen Country:

$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

END OF SECTION II SECTIONS III \& IV ARE BACK ON THE QUESTION PAPER

## 2020 TRIAL

## HS ECONOMICS

## Candidate number:

$\square$

| Date: | Fri 14 August (AM) |
| :--- | :--- |
| Total Time: | 3 hours $\& 5$ minutes |
| Total Marks: | 100 |
| Weighting: | $50 \%$ of total |
|  | assessment mark |
| Outcomes Assessed: | All |

## Checklist:

Each boy should have the following:
$\square$ Question Paper

- Answer Booklet
- 2 Writing Booklets


## General Instructions:

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Answer all questions in the Answer Booklet. Select the alternative A, B, C or D that most fully and correctly answers the question

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Answer all parts of the 4 questions in the Answer Booklet

- Section III: Stimulus Extended Response (20 marks)

Attempt one question from this section in a Writing Booklet. Answer this question after carefully reading the stimulus material

- Section IV: Extended Response (20 marks)

Attempt one question from this section in a Writing Booklet

- Board approved calculators may be used


# SECTION I: MULTIPLE CHOICE <br> 20 marks 

Attempt ALL questions
Select the alternative that best answers the question
Mark your answers on the sheet provided in the ANSWER BOOKLET
Spend no more than 35 minutes on this section

1. Which of the following is not a typical characteristic of a developing economy?

A Dependence on agricultural production
B Weak political and economic institutions
C Reliance on foreign aid
(D) Low level of inequality
2. In terms of Australia's free trade agreements, which one of the following is structurally different to the others?

| A | ANZ CERTA |
| :--- | :--- |
| (B) | AANZFTA |
| C | A-US FTA |
| D | CHAFTA |

3. This graph represents the Australian economy in 2017/18. What does it show?


A Industrial production
B Composition of imports
(C) Composition of exports

D Composition of the Balance of Goods \& Services
4. Which of the following international organisations has an aim to reduce the rate of extreme poverty to less than $3 \%$ of the world's population by 2030 ?

A International Monetary Fund
B World Trade Organisation
(c) World Bank

D Organisation for Economic Cooperation and Development

Questions $5 \& 6$ are based on the graph below, showing Australia's Terms of Trade:

5. Which of the following is generally true for the 2011 - 2014 period?

| A | Export prices have fallen relative to import prices | Terms of Trade has risen |
| :--- | :---: | :---: |
| (8) | Import prices have risen relative to export prices | Terms of Trade has fallen |
| C | Export prices have risen relative to import prices | Terms of Trade has risen |
| D | Import prices have fallen relative to export prices | Terms of Trade has fallen |

6. Which of the following statements is incorrect?

A The gains from the Mining Boom Mark I (Price Phase) were helped by the sharp rise in the Terms of Trade
B Since the last peak shown, Australia has been able to buy fewer imports for a given level of exports
C Post GFC there was a global recovery, sparking an initially higher Terms of Trade
(1) The falling terms of trade after 2011 shows that the quantity of exports sold rose more than the quantity of imports purchased
7. How can a government finance a budget deficit?

A Reduce government expenditure
B Increase company taxes
2 Sell Commonwealth Government Securities
D All of the above
8. The following table shows the change in the value of the United States dollar:

| Date | United States Dollar | Australian Dollar |
| :--- | :---: | :---: |
| January 2020 | 1 | 1.3 |
| March 2020 | 1 | 1.5 |

Which of the following theoretical statements is correct?
(A) Imported inflation into America will fall

B The volume of American exports to Australia will rise $x$
C American investment into Australia will fall $x$
D The Australian Dollar value of Australian debts denominated in US $\$$ will fall $X$
9. The following international flows have been measured in an open economy:


Which of the following measurements is also correct?

|  | Flow | Australian \$ (Millions) |  |
| :---: | :---: | :---: | :---: |
| A | Net Exports | +20 | + |
| B | Balance of Trade | +15 | + |
| C | Exports | -10 | + |
| (D) | Balance of Goods \& Services | -15 |  |

10. The following graph represents a model of a 3 sector economy's income and expenditure patterns:


By how much does income increase between Ye and Ye1
(A) 300

B 60
C 200
D $\quad 75$
11. The following graphs represent the demand (MB) and supply (MC) schedules for two goods, good (A) and good (B) with the social benefits \& costs represented by MSB \& MSC respectively:


What combination of policies would ensure that the social optimum is achieved in both markets?

|  | GOOD (A) | GOOD (B) |
| :--- | :---: | :---: |
| A | Govt restricting production |  |
| B | Govt legislating for a free market | Govt legislating for a free market + |
| C | Subsidies to the producers | Indirect tax on the good $\quad \checkmark$ |
| D | Banning imports of the good | Reducing the GST on the good |

12. The following table represents flows in a five sector economy over three years:

|  | Year 1 | Year 2 | Year 3 |
| :---: | :---: | :---: | :---: |
| Income | 100 | 200 | 350 |
| Exports | 20 | 30 | 30 |
| Govt Expenditure | 20 | 10 | 30 |
| Investment | 10 | 15 | 50 |
| Consumption | 50 | 150 | 250 |
| Imports | $?$ | $?$ | $?$ |

In which year(s) do net exports provide the greatest nominal injection?
A Year 1
(B) Year 2

C Year 3
D Years 1 and 3 equally

$$
\begin{array}{ll}
100=50+10+20+20-? 0 & 20 \\
200=150+15+10+30-? 5 & 25 \\
350=250+50+30+30-? 10 & 20
\end{array}
$$

13. According to traditional crowding out theory, which of the following is regarded as the most likely negative consequence of governments running successively bigger budget deficits over time, ceteris paribus?

A Worsening environmental sustainability
(B) Higher domestic interest rates

C Lower Current Account Deficits
D Higher inflation
14. If the government budgets for a surplus and there is an unexpected rise in the level of economic activity, which of the following is most likely to occur, ceteris paribus?

| A | Higher tax receipts $\quad \zeta$ | Rise in the structural component of the budget surplus $X$ |
| :--- | :---: | :---: |
| B | Higher tax receipts $\quad /$ | Fall in the cyclical component of the budget surplus + |
| C | Greater government expenditure | Fall in the structural component of the budget surplus |
| (D) | Lower government expenditure $/$ | Rise in the cyclical component of the budget surplus |

15. In the following diagram, DD and SS represent the demand and supply for cars:


If a subsidy of $\$ 10$ per unit were paid to producers, shifting the supply curve from SS to S1S1, what would happen to the price of cars, ceteris paribus?

A The price would remain the same
B The price would fall by $\$ 10$
C The price would fall by more than $\$ 10$
(D) The price would fall by less than $\$ 10$


16．If the Reserve Bank of Australia believes that the overnight money market is likely to deliver a cash rate below the target，what would it do？
（A）Sell Commonwealth Government Securities to reduce liquidity in the market
B Sell Commonwealth Government Securities to increase liquidity in the market
C Buy Commonwealth Government Securities to reduce liquidity in the market
D Buy Commonwealth Government Securities to increase liquidity in the market

17．Which of the following statements is true regarding the nature of goods？
A Goods with positive externalities are usually over－produced by the free market +
B Goods which are rival and excludable are best provided by the government $x$
（C）Non－rival and non－excludable goods are associated with the issue of free riding
D Private property rights do not exist if the good has negative externalities $x$

18．The following diagram shows changes in the demand for and supply of Australian dollars in the foreign exchange market：


Assuming a floating exchange rate，which of the following would most likely not be responsible for the change shown？
（A）More foreigners holidaying in Australia $P \sim_{n} D$
B Higher interest repayments on non－A\＄loans borrowed from overseas by Australians
C Higher dividends received by foreigners from their Australian equities $\uparrow$ in $S$
D Increased fears of a slowdown in the Australian economy $\eta_{\text {is }}$
19. Which of the following combinations is generally regarded as causes of low levels of national income?

|  | Global Factor | Domestic Factor |
| :---: | :---: | :---: |
| A | Weak entrepreneurial culture zom | Phantom aid Gl |
| B | High levels of agricultural protection | Highly skilled labour force $x$ |
| C | Tied aid | Poor access to capital |
| D | Sustainable Development Goals $x$ | High levels of foreign debt |

20. Consider the following table before answering this question.

| Year | Money GDP (\$ bn) | CPI | Refr Gid Guew |
| :---: | :---: | :---: | :---: |
| 1 | 1000 | 100 | 1000 |
| 2 | 1200 | 105 | 1143 |
| 3 | ? | 115 | 1500 (31.2\% |

If Real GDP in year 3 was $\$ 1500 \mathrm{bn}$, which of the following combinations is correct?

| A | Eco Growth in Year 2 is 20\% $\times$ | Real GDP in Year 1 is \$1000 |
| :---: | :---: | :---: |
| (B) | Money GDP in Year 3 is \$1725 | Eco Growth in Year 3 is 31.2\% |
| C | Eco Growth in Year 2 is 14.3\% | Money GDP in Year 3 is \$1304 $\Varangle$ |
| D | Real GDP in Year 2 is \$1143 | Eco Growth in Year 3 is 16.9\% |

$$
\begin{gathered}
\text { year } 31500=\frac{x}{115} \times 100 \\
x=1725
\end{gathered}
$$

## END OF SECTION I

## SECTION II: SHORT ANSWERS

## 40 Marks

The questions for Section II are contained in the ANSWER BOOKLET
Please complete your answers in the spaces provided
Marks for each part of the question are as indicated
Spend no more than 1 hour and 15 minutes on this section

## 2020 Trial Crib-Short Answers

## Question 21

a) Calculate the Unemployment Rate

| Criteria | Marks |
| :---: | :--- |
| $10 /(40+10+10)=16.67 \%$ | 1 |

b) Calculate the Inflation Rate in Year 3

| Criteria | Marks |
| :---: | :--- |
| $140 / 120=16.67 \%$ | 1 |

c) Why is there a conflict between achieving low inflation and low unemployment?

| Criteria | Marks |
| :--- | :--- |
| Explained the inverse relationship, both through cost-push <br> factors and demand-pull factors. <br> Explained either demand-pull factors or cost-push factors <br> thoroughly. | 2 |
| Stated the inverse relationship | 1 |

Better answers stated-relationship is inverse; that to lower Un, required increasing AD, would could contribute to Demand-Pull inflation; that lower Un is associated with less spare capacity which would also push up the price of labour causing also Cost-Push inflation.
d) Outline the concept of the NAIRU

| Criteria | Marks |
| :--- | :--- |
| Outlined the conceptual understanding of the NAIRU thoroughly. <br> Identified Structural and Frictional Un being present. <br> Identified the absence of Cyclical Un | 2 |
| Stated that the NAIRU stood for the Non-Accelerating Inflation <br> Rate of Unemployment <br> Stated the above acronym incorrectly | 1 |

NAIRU-Stands for the Non-Accelerating Inflation Rate of Unemployment. Learn this now if you didn't know it!
Better answers referred to it being the rate of Unemployment at which inflationary wage or price pressure wasn't stimulated. That at the NAIRU, there is NO cyclical, only structural \& frictional Un. Better answers further identified Australia's rate at being approximately 4-4.5\%(RBA est). Some answers acknowledged the NAIRU as being a similar or developed concept from the 'natural rate' of unemployment or the 'full rate' of Un. Some answers also identified it being the rate of Un that could only be lowered by AS or Micro policies.
e) Explain the different approaches taken by macroeconomic policies and microeconomic policies in terms of reducing Unemployment

| Criteria | Marks |
| :--- | :--- |
| Identified what Macro policies were <br> Explained how Macro policies targeted Cyclical Unemployment | $3-4$ |
| through AD. |  |
| Explained how Micro policies addressed AS and so addressed |  |
| structural, and frictional Un. |  |
| And/Or |  |
| Distinguished between short term and long term impacts of policies. |  |
| Identified what Macro policies were <br> Explained how Macro policies targeted Unemployment through AD. <br> Explained how Micro policies addressed AS and so addressed <br> structural, and frictional Un. | $2-3$ |
| OR |  |
| Explained how Macro policies reduced cyclical Un |  |
| Explained how Micro addressed structural Un |  |$\quad$| Stated what Micro/and or Macro policies were |
| :--- |
| Made generalised comment about policy impact on unemployment |

Better answers stated that Macro (Monetary and Fiscal) targeted AD. They stated that expansionary MP (lowering ir's) and expansionary FP (budget deficit) would increase AD and therefore increase economic growth and lower cyclical Un-as labour is a derived demand. They then went on to state that Micro might reduce Un through increasing AS. Better answers also stated that micro AS policies would target structural and frictional Un as opposed to cyclical. Some also acknowledged the potential increase in structural Un through specific micro policies, but that this was outweighed by long term increases in growth and allocative efficiency that would result.

## Question 22

a) What has happened to the nation's income distribution?

| Criteria | Marks |
| :--- | :--- |
| The economy has become more unequal | 1 |

Movement away from the 'Line of Equality' will always cause inequality to increase.
b) What has happened to the Gini Coefficient?

| Criteria | Marks |
| :--- | :--- |
| Gini has increased/moved closer to 1 | 1 |

The Gini Coefficient will increase as it is a number between 0-1. (1=perfect inequality as 1 person owns all the wealth!). So, when society becomes more unequal, the number gets closer to 1 .
c) Distinguish between concepts of Income and wealth

| Criteria | Marks |
| :--- | :--- |
| Correctly defined both income and wealth <br> Stated the difference between | 2 |
| Correctly defined either income or wealth <br> Failed to identify the difference <br> Made a generalised comment about either/both | 1 |

All that was required for both a) and b) was to state more unequal; and increased. Some people wrote a paragraph!!! Opportunity cost says this reduced marks in another part of their paper.... Income is the 'return on factors of production-land; labour; capital and entrepreneurship.

Wealth is the accumulation of income not spent.
Too many people wrote that $Y$ was only wages and salaries. Also, the word 'return' is better than 'money' here as not all income is monetary.
Buzzwords here are 'return, factors of production, accumulation'.
d) Explain the likely impact on Australia's distribution of income following a rise in the rate of the GST

| Criteria | Marks |
| :--- | :--- |
| Outlined the GST <br> Identified and explained the regressive nature of the GST <br> Explained how and why this would increase inequality in Australia's <br> distribution of income <br> May have acknowledged the role of GST funding in provision of <br> socially valuable resources such as health and education spending by <br> the state governments and thus also played a role in improving Y <br> distribution | 3 |
| Stated that an increase in the GST would reduce income inequality <br> Made a statement about the impact of the GST on lower income <br> groups | 2 |
| Made a generalised statement about the GST <br> Incorrectly identified the impact it would have on income distribution in <br> Australia | 1 |

This was done well, most people stated that an increase in GST would increase $Y$ inequality. This is because it is 'regressive' in its incidence (burden). For 3 marks you should also have explained why it's regressive-a flat rate tax will be regressive because it makes up a larger share of a smaller income, therefore the lower the income the larger a proportion of income paid in tax. Some people acknowledged lower incomes having a higher MPC also. Extra kudos to those who went a step further and stated that the GST actually provides funding to the states so they can finance health and education spending, thus reducing it's increased inequality somewhat.
e) Account for the difference in wealth held by males and females in Australia

| Criteria | Marks |
| :--- | :--- |
| ldentified the relationship between income and wealth <br> Explained reasons for the gender pay gap <br> Explained other reasons that caused disparities in wealth | 3 |
| Explained some reasons for the gender pay gap <br> Explained link between income and wealth | 2 |
| OR |  |
| Explained all reasons for the gender pay gap |  |
| Failed to make any valid links between income and wealth for |  |
| women/men |  |
| Generalised comment in regard to gender, wealth and income | 1 |

Again, wealth stems from the accumulation of unspent income. Therefore, inequality of wealth based on gender stems from the gender pay gap predominantly. Policy such as superannuation also contribute. Answers then should have described the main reasons for the gender pay gap. These reasons are:

1. Over representation of women in lower paid careers; also lower representation of women in management roles, even within these lower paid careers;
2. Over representation of women in part time and casual employment; also over representation of females taking time away from the workforce.
3. In occupations where wages and conditions are negotiated in a decentralised way, despite equal training, education and experience women receive less pay for equal work. Better answers stated the amount of the gender pay gap in Australia-14\% May 2020(WGEA)
Notice here how I didn't say... "Women choose to stay home and care for children"?

Notice how I didn't say "women don't do dangerous jobs"? (Also-what do you mean by dangerous jobs? It's not the 1920's...).
Notice how I didn't say men get paid more because they are more desirable workers?
Notice how I didn't say that "Men get paid more because women have a child birth risk to business?"
Notice how I didn't say "Men are better suited for managerial roles and women are more suited for caring, lower paid careers"?
Notice how I didn't say "women prefer part time or casual work to allow for their family duties". Notice also that I didn't say men inherit more wealth than females do? Not even the British Monarchy still think this way...
Always state an educated, open minded, non-sexist, non-misogynistic perspective. Actually, this is good life advice.
Lessons on feminism 101(Actually, lessons on being a decent human 101)-You can say that "women are over represented in part time or casual work", but, you can't say "women prefer to work part-time or casual hours". Why? Because you don't speak for women. Especially, you don't speak for all women. Let women do that for themselves.

## Question 23

a) Draw and Label the impact of a successful privatisation program by the Australian government.

| Criteria | Marks |
| :--- | :--- |
| Shifted the AS curve to the right | 1 |

The AS curve shifts to the right and down, it increases. Many boys just didn't see the question...and LABEL!
b) Outline the 3 efficiencies that MER are aimed at.

| Criteria | Marks |
| :--- | :--- |
| Correctly identified and stated characteristics of: <br> Technical; Allocative and Dynamic efficiency | 3 |
| Correctly identified all 3 efficiencies <br> Outline 1-2 efficiencies | 2 |
| Correctly identified 1-2 efficiencies | 1 |

Technical efficiency-utilising the most efficient production methods-lowering LRAC to technical Optimum; engaging in the most efficient and technically advanced production methods.
Allocative efficiency - operating on the edge of the PPC; operating where OC is the lowest; directing resources to their most efficient use.
Dynamic efficiency-the ability of firms to adapt to changing markets and demand; to alter resource use as efficiently as possible.
c) Using an Australian example, explain how deregulation has been used as a MER

| Criteria | Marks |
| :--- | :--- |
| Defined deregulation and MER <br> Identified, using specifics, one example of deregulation in Australia <br> Used the example to show that the aims of MER had been achieved <br> Gave measures for the achievement of MER aims in that example | 3 |
| Defined deregulation/and or MER <br> Identified one or more examples of deregulation in Australia, with <br> fewer, if any specifics of this example <br> Outlined some knowledge of benefits gained from this deregulation | 2 |
| Made a generalised statement in regard to a MER policy | 1 |

Deregulation is the removal of regulations-rules and procedural inefficiencies. MER aims to increase efficiency, to increase productivity and maximise return on all factors of production/resources increasing AS. An Australian example means a specific policy or occurrance where deregulation helped achieve these objectives. Some examples used were: Financial market regulation; labour market decentralisation; agricultural deregulation; airline deregulation; telecommunications deregulation...You should have made the link between the policy and the MER outcome as the question asked you to 'explain'.
d) Explain how competition policy has been used in Australia as a MER

| Criteria | Marks |
| :--- | :--- |
| Defined competition policy and linked to MER <br> Identified, using specifics, several aspects of competition policy in <br> Australia <br> Used specifics regarding competition policy to show that the aims of <br> MER had been achieved | 3 |
| Made a few statements regarding competition policy in Australia <br> Identified one or more generalised policies to encourage competition in <br> Australia, with fewer, if any specifics | 2 |
| Made a generalised statement in regard to competition in Australia | 1 |

National Competition Policy (1995); 'competitive neutrality'; ACCC; 'workable competition' are all forms of Australia's competition policy. To achieve full marks you needed an example of when/how this policy worked to achieve MER aims in Australia eg: '4 pillars policy' "anti-trust laws'; telecommunications; airlines; mergers and acquisitions..

## Question 24

a) Outline ONE benefit and ONE cost of using tariffs to protect domestic industries.

| Criteria | Marks |
| :--- | :--- |
| Correctly Identified one benefit and one cost of tariffs <br> Outlined the benefit and costs identified | 2 |
| Identified one cost and one benefit, outlined one benefit or one cost <br> OR <br> Identified and Outlined either a cost or benefit | 1 |

This was done well.
Benefits could include-Short term protection of employment; protection against dumping; source of Gov't revenue...
Costs-decreased allocative efficiency; protection of inefficiency; long term reduction in growth; retaliation; difficulty in removal...
b) Explain the likely effects of a lower Aust Dollar on Australia's BOP

| Criteria | Marks |
| :--- | :--- |
| Identified the components of the BOP affected by a depreciation <br> Explained the impacts of a depreciation on the CA, BOGS, netPY and <br> KAFA. | 4 |
| Identified some components of the BOP affected by a depreciation <br> Explained some impacts on different accounts within the BOP | $2-3$ |
| Made a generalised statement about a depreciation or the BOP | 1 |

$B O P=C A+K A F A$
CA...BOGS improves as

X's become more competitive; may be a J-Curve effect in short term; Volume effect in medium to long term; better answers also acknowledged the inelasticity of demand for our largest X (Iron ore), the Marshall-Lerner condition;

M's become more expensive reducing volume of M's; elasticity discussion here as M demand more elastic

BOGS Surplus during time of depreciation as evidence
Net Primary Y impact-Valuation effect-depreciation causes Australian value of foreign debt service flows held in o/s currency to increase, thus negatively impacting the Net PY balance. This is offset by increasing \$AUD value of inflows of foreign asset returns held by Australians. Better answers stated the actual balances on these accounts.

KAFA-valuation impact on financial assets held by Australians O/S and by foreign investors here, cheaper for overseas investors to invest in Australia, may cause increased inflows on Financial account. Better answers included eg's of depreciation of \$AUD on real balances of these accounts...Tip for new players- Picture the structure of the BOP and start with the BOGS impact on the CA, go to the FA and the KAFA and then back to the resultant impact on the NPY and therefore CA again. This process follows the trail of money and its subsequent impacts on both accounts.
c) With reference to ONE economy other than Australia, how has the government responded to fluctuations in the IBC?

| Criteria | Marks |
| :--- | :--- |
| Explained specific government responses from China in response to <br> fluctuations of the IBC | 4 |
| Used specific policy responses <br> Gave evidence for both the fluctuation/s and the policy responses | $2-3$ |
| Explained some government policies from China and vaguely linked <br> them to the IBC | 1 |
| Made generalised statements about globalisation and China's <br> economic policies | 1 |

Answers should have discussed specific Chinese policies that were used to address specific fluctuations in the IBC.

The fluctuations referred to could have included: the current post Covid drop in growth; the GFC drop in growth; secular stagnation post GFC; Growth in the IBC pre GFC and since the 80 's. As always the more current the fluctuation, the more impressive the response.

The Policies could have included: Fiscal stimulus; Monetary Stimulus; Increased domestic demand and development to insulate the economy; OBOR to foster faster growing trading partners; focus on Al and technology. Manipulation of the currency is not a strong answer as it is not a response to fluctuations, more a policy to maximise trade. It was not implemented to counter a fluctuation in the IBC, but to give China a trade advantage.

## SGS HSC TRIAL EXAMINAITON 2020

25. Discuss the effectiveness of fiscal and monetary policy in terms of achieving their objectives.

| CRITERIA | MARKS |
| :---: | :---: |
| - Demonstrates factually precise and extensive knowledge to develop a logically sequenced answer that clearly identifies the effectiveness of fiscal and monetary policy in terms of achieving their objectives. <br> - Uses relevant data to support a contemporary and comprehensive discussion that recognizes the objectives under which fiscal and monetary policies are set <br> - Integrates economic terms, concepts, issues, relationships and theory in a highly competent manner | 17-20 |
| - Good use of appropriate knowledge to develop an answer that highlights effectiveness of fiscal and monetary policy in terms of achieving their objectives. <br> - Uses relevant data to support a discussion of the objectives under which fiscal and monetary policies are set, but lacking some depth of analysis <br> - Sound usage of economic terms, and concepts and relationships are applied in reasonable detail | 13-16 |
| - Uses correct and usually relevant information to demonstrate some knowledge and understanding of the effectiveness of fiscal and monetary policy in terms of achieving their objectives. <br> - Discussion of the effectiveness of fiscal and monetary policies is flawed in places, detracting from the quality of the response <br> - Use of economic terms, concepts and relationships is limited, highlighting weak comprehension | 9-12 |
| - Lacks any development of a suitable response <br> - Makes minimal use of data to support discussion <br> - Use of relevant economic terms, concepts and relationships is extremely limited | 5-8 |
| - A response that reflects a standard barely above a non attempt | 1-4 |

Comments:
20-2, 19-5,18-8, 17-14, 16-15, 15-8, 14-8
Mean: 16
Median: 16
Comments

- The standard certainly varied. The better answers mostly worked within time periods, outlined leading indicators, prioritised objectives, discussed policy stance and ONLY THEN examined the effectiveness of the policies. Some also referred to economic functions like income distribution, reallocation of resources and external stability, which is excellent if you write fast, legibly and have a memory for statistics but most focused on sustainable growth, inflation targeting and full employment as key objectives.
- Many wrote all they know on macro policy theory and a narrative about changes in stance without answering the question - discussing the effectiveness. If I have written 'effectiveness?' on your paper, you know I am talking to you.
- An explanation on the implementation not necessary unless you tie in the unconventional liquidity measures introduced during emergency stimulus settings in 2020
- STATS, STATS and more STATS...are needed to write a decent response.


## How to use the stimulus:



Last 10 Years - Australia's Cash Rate Target (\%)


A - contractionary stance, B - why the expansion? change in govt? MP and FP both expansionary, C - mildly contractionary
1 - Contraction, 2 - incremental expansion, 3-What was gong on here? 4-expansionary then emergency measures

## Answers could include:

## INTRODUCTION

Definition of monetary and fiscal policy, objectives and statement about effectiveness BODY
Relevant theoretical diagrams:
MP and FP as instruments of macro policies (Cyclical/Demand-Side/Y=C+I+G+X-M), countercyclical auto stabilisers or income and expenditure analysis much more useful than the corridor diagram for implementing MP. Please LABEL correctly and REFER to them if you include them.


NB - many responses created time frames, identified the state of the nation, discussed specific monetary and fiscal policy decisions and THEN commented on effectiveness. The crib here is split so that you have detailed material on both policies and you can work out how best to arrange it.

## MONETARY POLICY

## Introduction

- Is undertaken by the RBA, NOT the Govt.
- Is generally the "swing arm" instrument
- Specific aim is to achieve inflation target of 2-3\% pa on average over time as this is regarded as a pre-condition for achieving sustainable eco growth.
- Works via the transmission mechanism which has a number of channels: inter-temporal substitution effect, cash-flow/liquidity, expectations, exchange rate and asset p/wealth - in theory, anyway.


## Recent Policy

- In detail inc. SPECIFIC reference to inflation target/objectives:


## 2009-2011:

$\times 7$ cash rate rises to $4.75 \%$ (last one was Nov 10) as inflation pressures emerged coming out of the GFC. Growth back up to $3.3 \%$ in 2009/10 as Mining Boom Mark II takes /took hold. Petrol, utilities (gas, elec andwater) and food prices (floods, Cyclone Yasi, supply issues) main contributors to inflation with CPI reaching $3.6 \%$ in 2011 and underlying rate strengthening to $2.75 \%$. Concern too re capacity constraints inc NAIRU as unemp falls to $5 \%$. Also, one negative growth quarter due to natural disasters as well as Euro and US financial crises suggest next movement would be up. Cash rate tightened to $4.75 \%$ in 2011

2012-2016:
Challenging times for the RBA with growth slowing to $2.5 \%(3 / 13)$ and unemp rising to $5.7 \%$ ( $7 / 13$ ). Also issue of 2 speed economy with WA and Qland booming with mining but other states struggling. RBA cut the cash rate to $2.75 \%(5 / 13)$ and again to $2.5 \%(8 / 13)$. Note this was then an all-time low for the cash rate and lower than the 'emergency setting' of $3 \%$ in the GFC. Main reason was little evidence of demand-pull or cost-push inflation pressures. D-side: weak C; high $S(10.5 \%$ of $Y$ ); mining I peak; other I slow (RBA waiting on dwelling I to $\uparrow$ ). $S$-side: wage price index subdued ( $3.1 \%$ pa in $5 / 13$ ); other cost pressures weak. Also imported inflation pressures reduced with the (still relatively) high \$A making $M$ (of both final $g$ ands plus inputs) cheaper. China also slowed with growth estimate for 2012 of $7.5 \%$.

Euro sovereign debt crisis was not resolved quickly, whilst USA and Japan not recovering. Clearly global uncertainty was denting consumer confidence both here and across the globe

More recently growth has slowed to $1.7 \%(3 / 17)$ and inflation is at $1.9 \%(6 / 17)$; indeed, CPI has been below $2 \%$ for 10 out of last 11 quarters (almost 3 years). Also, average wage growth is at record low of $1.9 \%$ pa, which is preventing any significant $\uparrow$ in consumption. Consequently, May 2016 there was another $0.25 \%$ cut to $1.75 \%$ and the last cut was in August 2016 to 1.5\% (a new record low), where it has stayed for the last year. This is clearly an expansionary approach; indeed, RBA recently talked about the neutral cash rate (basically the 'sweet spot' in terms of cash rates/the long-term average even) as now being 3.5\% rather than $4.5 \%$. RBA faces a difficult decision as inflation is well below target and growth needs boosting but, if it cuts rates further, there will be further upward pressure on a housing market, which is already overheating in Sydney and MIb. Also doubts re its effectiveness in boosting $C$ and $\mathrm{I} /$ Keynes' 'animal spirits' as confidence is lacking especially with global political turmoil. It can't raise them yet either as this would dampen any recovery and put further upward on the already 'high' dollar (@US0.80), which is hurting X and M -competing firms.

## 2016-2019

i) 2016-2017: Growth has slowed to $1.7 \%(3 / 17)$ and inflation is at $1.9 \%(6 / 17)$; indeed, CPI has been below $2 \%$ for 10 out of last 11 quarters (almost 3 years). Also, average wage growth is at record low of $1.9 \%$ pa, which is preventing any significant $\uparrow$ in consumption. Consequently, May 2016 there was another $0.25 \%$ cut to $1.75 \%$ and the last cut was in August 2016 to 1.5\% (a new record low). This is clearly an expansionary approach; indeed, RBA recently talked about the neutral cash rate (basically the 'sweet spot' in terms of cash rates/the long-term average even) as now being $3.5 \%$ rather than $4.5 \%$. RBA faces a difficult decision as inflation is well below target and growth needs boosting but, if it cuts rates further, there will be further upward pressure on a housing market, which is already overheating in Sydney and Melbourne. Also doubts re its effectiveness in boosting $C$ and $I / K e y n e s '$ 'animal spirits' as confidence is lacking especially with global political turmoil. It can't raise rates yet either as this would dampen any recovery and put further upward on the 'high' dollar (@USO.80), which is hurting X and M -competing firms.
ii) 2017-2018: Cash rate has been $1.5 \%$ since Aug 2016, inflation @ 2.1\% - expansionary MP continued to underpin economic growth as Australia transitions to non- mining growth. GDP growth is expected to average a bit above 3 per cent in 2018 and 2019. This should see some further reduction in spare capacity. Business conditions are positive and non-mining business investment is continuing to increase. Higher levels of public infrastructure investment are also supporting the economy, as is growth in resource exports. One continuing source of uncertainty is the outlook for household consumption. Household income has been growing slowly and debt levels are high. Growth in consumption remains constrained due to low wages growth. The drought has led to difficult conditions in parts of the farm sector.

## 2018-2019

A number of global and domestic risks were causing concern about Australia's economic performance:

- Trade tensions between US and China were a potential risk if Chinese economic growth was to slow - softening investment intentions
- Domestically main concern was slow growth of household consumption, constrained by low wages growth
- While unemployment steady and strong growth in jobs, underemployment remains an issue - spare capacity keeping wages growth low
- Credit restrictions on investors domestically softened the demand for housing

The RBA left the cash rate unchanged at 1.5\% for over two years (until June 2019, then dropped 50 basis points in $2^{\text {nd }}$ half 2019) but often throughout, mentioned the need for the government to apply direct fiscal stimulus due to the diminishing marginal effectiveness of expansionary stimulus

## Overall Effectiveness

## Advantages:

Short implementation lag (meets every month except Jan)
Independence from govt/political pressures; eg in run up to an election has been effective in restraint

## Disadvantages:

- Long impact lag (6-18 months for full effect; RBA's Chris Kent said a $1 \% \downarrow$ in cash rate leads to an $\uparrow$ in GDP by $0.5-0.75 \%$ over 2 years and $\uparrow$ in inflation by $<0.25 \%$ pa over $2-$ 3 years); eg reason why fiscal policy took dominant role in GFC and COVID-19.
- Blunt; eg 2011/12 unable to deal with the 2 /multi-speed economy when needed to increase interest rates to curb inflation. Those increases affected all sectors through higher borrowing costs AND they contributed to the rising \$A, which helped mining indies but not service and other X industries, nor import-competing indies.

Not so effective in:
a) boosting agg d; consider the liquidity traps or 'zero lower bound' issues where longstanding v low interest rates have failed to spark recovery eg Now!!
b) addressing structural issues such as high CAD, low productivity

Conflicts; eg $\uparrow$ cash rate to $\downarrow$ infl but may cause $\uparrow$ unemp; or $\downarrow$ cash rate to $\uparrow$ growth but may cause $\uparrow d$ for $M$ and worsening of balance of trade/CAD

## Judgement:

Over the longer term RBA has done well to manage inflation targeting. Australia also achieved world record of years without a recession so successful (despite current issues...)

May have been more effective if supported by fiscal policy stance in more recent phase; latter has been contractionary due to political constraints of getting rid of the deficit $\downarrow$ govt debt (see below)

## FISCAL POLICY

## Introduction

- Use of Federal Govt's budget to achieve its objectives
- General impacts on eco growth, reallocation of resources, income distribution and national S
- Keynesian 'pump priming' the economy to boost it out of recession; e.g. Rudd in the GFC and current emergency settings in 2020
- Objectives have varied with the times


## Recent Policy

- 2011-17 Budgets:

4 key goals:

1) Fiscal Consolidation and return to surplus
2) Lift Workforce Skills and Participation
3) Boost Infrastructure Capacity
4) Increased Spending on Priority Areas

A series of successively smaller deficits were planned. The overriding aim of both Labour and Liberal budgets has been to reduce the deficit/get the budget back into surplus as a result of political pressures of their own making; ie their pre-election(s) promises!! At the beginning of this era this contractionary stance supported monetary policy but once the RBA started to $\downarrow$ the cash rate, the macro policies were in conflict and they remained so until 2020. However, it is worth noting that each budget has suffered from 'blow outs' ('unforeseen' $\uparrow$ in G and/or $\downarrow$ in T , mainly as a result of automatic stabilisers kicking in as the economy slowed). The 4 -year forecast for each of these budgets had the outcome back into surplus in its 4th year but none got there!

- Main sources are PAYG 47\% of total, Indirect Tax (incl. GST) 25\% andCo Tax 18\%
- $2 \%$ deficit repair levy for those earning $\$ 180 \mathrm{k}$ removed from $1 / 7 / 17$
- 2 major new initiatives:

1) Increase in Medicare Levy from $2 \%$ to $2.5 \%$ from $7 / 19$ to raise $\$ 8.2$ bn over 4 years towards NDIS funding
2) Big 5 Bank Levy of equivalent to $0.06 \%$ of deposits over $\$ 250 \mathrm{k}$ to raise $\$ 6.2 \mathrm{bn}$ over 4 years from 7/17

- Pushed hard on 2016 '10 Year Enterprise Plan' with big cuts announced for companies with $\$ 10 \mathrm{~m}$ or less turnover cut to $27.5 \%$ from $30 \%$ (or from $28.5 \%$
currently if turnover less than $\$ 2 \mathrm{~m}$ ) this year then future cuts to be phased in so most companies will pay $25 \%$ by 2027 - never passed in Senate


## 2018/2020 Federal Budget

The stance of both the 2018-19 budget and 2019-20 budget were mildly contractionary with a change of $0.2 \%$ of GDP in the budget outcome (2019) and $0.6 \%$ of GDP in 2020. Note that $0.2 \%$ of GDP is around $\$ 3.2 \mathrm{~b}$ in an economy of $\$ 1.8 \mathrm{t}$ - in other words, not a significant difference at all in terms of being a drag on growth. Indeed, it was thought the actual outcome for 2018-19 may turn out to be expansionary depending upon the actual level of tax receipts and the impact on that of external factors of commodity prices, overseas interest rates, the exchange rate, trade tensions, the participation rate and the level of wages growth. Importantly, the improvement in the 2018-19 budget fiscal outlook was not policy driven but rather the result of some "heroic assumptions" (Grattan Institute) specifically:

- despite the lowest wages growth in 18 years, wages growth was assumed to move to $3.5 \%$ per year, with a consequent uplift in tax revenues (it did not get there)
- the wage growth, through increases in C, lifts economic growth to above trend 3\%
- spending growth in real terms declining from $3.1 \%$ (2019) to $0.2 \%$ ("Herculean spending restraint" - Gittins)


## PROGRAMS AND POLICIES WITHIN THE 2018/19 and 2019/20 BUDGET

The 2018/19 budget was the third (and final) budget for Treasurer Scott Morrison, and occurred in the context of being the last budget before a Federal election was called. The 2019/20 Budget, delivered by Josh Frydenberg, was delivered immediately prior to the calling of the 2019 Federal election and was ultimately the economic platform that the government successfully took to the election.

In that context, the political constraint of re-election had a significant impact on the policy setting of both budgets, including:

- introduction of a speed limit on taxes as a percentage of GDP - keeping taxes as a share of GDP within a $23.9 \%$ cap (introduced 2019 and kept 2020)
- total savings initiatives of only $\$ 30.7 \mathrm{~m}$ in the $2018 / 19$ year, and no savings in 2020 (actually $\$ 7 \mathrm{~m}$ increase spend within savings measures)
- introducing the Personal Income Tax plan - an offset for low and middle income earners (max $\$ 530$ per year increased to $\$ 1,080$ per year in the 2019/20 Budget) and lifting the 32.5\% tax bracket to $\$ 90,000$ (from $\$ 87,000$ ) from 1 Jul 2018 - reducing revenue by $\$ 13.4$ b over 4 years (impacting over 10 m Australians)
- cancelling the proposed $0.25 \%$ Medicare increase to fund the NDIS program (from the 2017/18 budget) - reducing revenue by $\$ 12.8$ b over 4 years
- targeting the black economy in illicit tobacco sales and generally - increasing revenue $\$ 6.1 \mathrm{~b}$ over 4 years
- expansion of the pensioner work bonus - age pensioners to earn up to $\$ 300$ per fortnight (up from $\$ 250$ ) without reducing pension payments
- extension of the small businesses $\$ 20,000$ instant asset write-off to encourage investment, increased to $\$ 30,000$ in 2020 for business up to $\$ 50 \mathrm{~m}$ turnover
- $\$ 24.5$ billion for new nationally significant transport projects
- an additional $\$ 1.9$ b over 12 years in national research infrastructure to help Australians deliver high impact research in health, manufacturing and agriculture; $\$ 41 \mathrm{~m}$ to establish a national space agency and grow the Australian space industry and $\$ 140$ million for the Pawsey Supercomputing Centre in Perth and the National Computational Infrastructure facility at the Australian National University.
- Changes to G and T can be very targeted.


## Disadvantages:

- Long implementation lag; only set once pa (May) - except emergency settings
- Politically motivated so has focused on short term rather than medium/long term, with particular emphasis on reducing the budget deficit/debt


## Judgement:

- Due to political focus on $\downarrow$ deficit/debt, fiscal policy has conflicted with monetary policy's expansionary stance in recent time period
- However, as mentioned above, Australia has had record period of growth, contained inflation and lowish unemployment, $\downarrow$ CAD, etc...although could we have performed better??


## LIMITATIONS OF FISCAL POLICY

There are a range of limitations and constraints on fiscal policy. Whilst the invact time frame is quite short (a few months). there are a range of economic and political constraints which impact fiscal policy. Constraints include time lags, global influences and political constiaints.

In the recent Austialian context, the following are limitations or enablers in reation to fiscal policy:

| Current business cycle | The contractionary impetus of the tail of the mining investment boom limited revenue growth, which limits the use of fiscal policy to improve income distribution. Bounce in commodities prices. improvement in global growth and increased enaployment has increased collections of personal and corporate income taxes (\$40b over 5 year inclease). |
| :---: | :---: |
| Global buslness cycle | The GFC significantly narrowed Australia's policy choices. without the GFC, Australia would lave continued with small surpluses, which could then have been used to provide the financing for expansionary budgets to manage the tail of the mining investment boom. On the other hand, the growth impetus provided by the industrialisation of China and the nining investment boom provided fiscal policy options in relation to retiring debt reducing taxes, increasing social welfare payments and saving modest surpluses. An economic downturn in China. or gobal trade tensions, would operate as a constlaint on domestic fiscal policy choices. |
| Current borrowing and saving position | Where existing gorernment debt (borrowing) is too high, this may preclude future borrowing to fund expansionary budget outcomes. Where savings are arailable, this may provide the fiscal space in onder to respond to adverse shacks in the economy. Rebuilding fiscal space is the objective of fiscal consolidation, which results in pro cyclical lather than counter cyclical fiscal policy. |
| Demographies | Population demographics. for example the ageing of the population, puts pressure on the budget by increasing social welfare spending and health spending, which will worsen the budget position unless taxes rise (health costs increasing faster than inflation). |
| Globaltsation impacts | Globalisation, tariff reductions and movement of johs oyerseas may increase imports, lower A.D. reduce personal and company income tax receipts, increase unemployment and increase social weliare pūyments, retraining spend, and industry adjustment programs. |
| Previous micro reform | Financial deregulation (floating dollar in particular) provided an important shock absorber for the economy (slowing non mining parts of the economy) resulting in a smaller role for macro (fiscal and monetary policy) in managing the fluctuations in the level of economic activity. |

However, one of the most important constraints on fiscal policy is the polltical constraint - which has two dimensions: getting laws passed, and getting elected. The budget is a plan, which requires legislation to be passed to put in place. In recent Austialian political history, the party in office (which controls the House of Representatives) has not controlled the second chamber of the Parliament. the Senate. The impact of this on fiscal policy is that whilst disputed measures can be easily passed in the House of Representatives. they never become law because the Senate refuses to pass them. This was the case, for example, with the Hockey zombie measures and delays to Turnbull's corporate tax cut proposals.

ECONOMIC GROWTH LIFTED AHEAD OF VIRUS IMPACT (maybe monetary policy working, finally...?)

Australia's annual economic growth rate increased slightly late last year according to National Accounts data. The National Accounts measure the level of income, production and expenditure in the economy over a specific period. Changes in these three aggregates, which are in theory equal to each other, indicate the level of economic growth that has taken place between two time periods.

Economic growth is the most commonly measured by estimates of the level of production or output in an economy via an aggregate known as Gross Domestic Product (GDP). During the December quarter of 2019, the level of GDP increased by $0.5 \%$. This was marginally lower than the $0.6 \%$ expansion in GDP recorded in the September quarter; but was above the $0.2 \%$ rise recorded in the same quarter of 2018. For the year to December 2019, the rate of economic growth was $2.2 \%$, up from $1.8 \%$ in the year to September.


The chart above shows that the current rate of growth is above the low points reached around the time of the Global Financial Crisis (GFC)

The main contributors to economic growth over the December quarter were stronger consumer spending and government spending, as well as a rise in inventories. A $0.4 \%$ rise in household consumption, in real seasonally adjusted terms, was an improvement on the rate of increase of just $0.1 \%$ in the preceding quarter - but still below the longer-term quarterly average rise of $0.9 \%$. Consumption spending by households is the largest component of domestic demand.

## 2020 - UNPRECEDENTED STIMULUS IN RESPONSE TO CORONAVIRUS SPREAD Monetary and Fiscal policy emergency settings

The Reserve Bank and Commonwealth Treasury are attempting to cushion this financial and economic blow by ensuring the financial system keeps operating and providing income supplements to affected workers and businesses to sustain them through the predicted slump. The initiatives listed below amount to $\$ 319$ billion of support to individuals and businesses. This represents $16.4 \%$ of annual Australian Gross Domestic Product. Beyond that, the Reserve Bank's decision to lower cash interest rates and purchase bonds to lower medium-term lending rates, provides a substantial additional source of stimulus.

| Date | Description | Scale |
| :--- | :--- | :--- |
| 3 March, <br> 2020 | Monetary Policy Decision | Cut cash rate by $0.25 \%$ to $0.50 \%$ |
| 12 March, <br> 2020 | First economic support and stimulus <br> package | $\$ 17.6$ billion total package value |


| 16 March, <br> 2020 | Support for markets | Increased purchase of bonds and short- <br> term securities (repos) |
| :--- | :--- | :--- |
| 19 March, <br> 2020 | Unconventional Monetary Policy | Further $0.25 \%$ reduction in cash rate to <br> $0.25 \%$ <br> Targeted yield of 0.25\% for 3-year bonds <br> 3-year term $\$ 90$ billion funding for banks <br> to support small businesses <br> Bank deposits at the RBA will earn <br> $0.1 \%$ pa interest not zero |
| 19 March, <br> 2020 | Federal government SME funding | $\$ 15$ billion to purchase securities of <br> smaller ADIs and non-ADI lenders |
| 20 March, <br> 2020 | Easing of responsible lending <br> requirements for small business <br> credit | Quicker flow of funds when banks lend to <br> small business |
| 22 March, <br> 2020 | Second economic support and <br> stimulus package | \$66.1 billion total package value |
| 30 March, <br> 2020 | Third economic support and <br> stimulus package | $\$ 130$ billion total package value |

Overall, these are very substantial and unprecedented initiatives. However, despite their magnitude, they may still fail to neutralise the size of the economic downturn likely experienced. The announcements provide a degree of reassurance regarding continuity of income for individuals and businesses, but there will still be considerable short-term economic uncertainty. The worst of the economic impact of the pandemic is expected to be in the June quarter and most of this support will be delivered in that period - whether in cash or incentive.

The huge scale of the fiscal support program will push the Commonwealth Government's budget position deeply into deficit and substantially lift government debt levels. The government has announced a lift in the debt ceiling from $\$ 600$ billion to $\$ 850$ billion 'to ensure it has the capacity to deal with the ongoing economic impact of the coronavirus.' In addition, the date of the 20202021 Budget Statement has been delayed from May until 6 October, 2020.

## Monetary Policy 2020

Headline and underlying inflation were forecast to pick up to $2 \%$ in 2019-20 but this came to an abrupt halt with the onset of the COVID-19 pandemic. Business went into hibernation which quickly impacted on spending, output and unemployment levels. In order to support fiscal stimulus, MP became more accommodative:

- Reduction in the cash rate from 0.75-0.25. CR will not be increased until the economy is making sustainable progress towards goals of full employment and inflation target
- Introduction of a target for the yield on 3yr AGB of 25 basis points and being prepared to buy govt bonds to achieve that target.
- Introduction of a Term Funding Facility in which ADIs have access to funding from RBA at $0.25 \%$ with additional funding available if ADIs increase lending to business.
- Using daily market operations to make sure there is plenty of liquidity in the financial system
- Modifying the corridor so that ESA earn 10 basis points not zero.

The low int rate environment should keep AUD low to help exports

## STATE OF THE ECONOMY, JULY 2020

Budget Bottom Line

|  | $2019-\mathbf{2 0 2 0}$ | $\mathbf{2 0 2 0 - 2 0 2 1}$ |
| :--- | :--- | :--- |
| Mid-Year Economic and <br> Financial Outlook (MYEFO) | $\$ 5$ billion | $\$ 6.1$ billion |
| Revised | $\$-85.8$ billion | $\$-184.5$ billion |
|  |  |  |
|  | $\mathbf{2 0 1 9 - 2 0 2 0}$ | $\mathbf{2 0 2 0 - 2 0 2 1}$ |
|  | $-0.25 \%$ | $-2.25 \%$ |
| GDP Economic Forecasts | $1.75 \%$ | $1.25 \%$ |
| Wage Growth | $7 \%$ | $8.75 \%$ |
| Unemployment | $-0.25 \%$ | $1.25 \%$ |
| Inflation |  |  |

Debt

| Gross Debt Peak |  |
| :--- | :--- |
| MYEFO | Revised |
| $\$ 593$ billion | $\$ 851.9$ billion |
| Net Debt Peak |  |
| MYEFO | Revised |
| $\$ 361.1$ billion | $\$ 677.1$ billion |
|  |  |

## Employment Crisis

| Jobkeeper |  |
| :--- | :--- |
| Until September 27, 2020 | $\$ 1500$ per fortnight |
| September 28, 2020 - January 3, 2021 | $\$ 1200$ per fortnight OR $\$ 750$ per fortnight for <br> those working 20 hours or less |
| January 4, 2020 - March 28, 2021 | $\$ 1000$ per fortnight OR $\$ 650$ a fortnight for <br> those working fewer than 20 hours a week |
| Jobseeker | $\$ 565$ per fortnight, plus the $\$ 550$ Coronavirus <br> supplement (\$1115 per fortnight) |
| Until 24 September, 2020 | $\$ 565$ per fortnight plus a $\$ 250$ Coronavirus <br> supplement (\$815 per fortnight) |
| September 25, 2020 - December 31, <br> 2020 |  |

The Treasurer also announced a range of economic forecasts in the JEFU Statement. Overall economic growth is anticipated to be negative in both 2019/20 and 2020/21, Forecasts of major economic variables are provided in the table below:

| Eeanamie Varlable | $\begin{array}{\|c\|} \hline \text { Oulcorneo } \\ \hline 2016.19 \\ \hline \end{array}$ | Forteam |  |
| :---: | :---: | :---: | :---: |
|  |  | 2019.20 | 2020.21 |
| Reai prosidemeste prodici | 2.0 | -1/4 | $21 / 2$ |
| Housenold cuns umpuin | 20 | $21 / \pi$ | 114 |
| Oueding inestiment | - | $-10$ | - 16 |
| TCOS businest inmestriert | 0.9 | 6 | 12 t 2 |
| Exame or geods sid sernces | 40 | -1 1.2 | $61 / 2$ |
| imponts or grucs and sercies | 0.3 | 8 | 6 |
| Net experts | 08 | $11 / 4$ | $1 / 2$ |
| riominal gross donvestos prodica | 53 | 2 | 434 |
| Comauner price insex (ties Auge) | 1.6 | -1/4 | 1/6 |
| Wage price sidex (Yeer A Agàl | 23 | 1314 | $12 / 2$ |
| Parkentico late (hale OU) | 65.0 | 03.8 | $66^{3} 34$ |
| Eniplognientidure oth | 25 | 4.4 |  |
| Unemploymivet rals (Jane all) | 5.2 | ' | 4 |
| Tems ct liade | 5.7 | $13 / 4$ | $-121 / 4$ |
|  | -0. | 13.4 | +1/44 |

Job trainer and health spending increases were announced in June economic and fiscal update.

## SGS HSC Trial Examination 2020 comments

Q26. Discuss the use of environmental policies in terms of promoting ecologically sustainable development in Australia.

| CRITERIA | MARKS |
| :--- | :--- | :---: |
| -Demonstrates extensive knowledge to develop a logically sequenced answer that <br> clearly discusses the the use of environmental policies in terms of promoting <br> ecologically sustainable development in Australia. | $17-20$ |
| - Uses relevant data to support a contemporary \& comprehensive discussion |  |
| -Integrates economic terms, concepts, issues, relationships and theory in a highly <br> competent manner |  |
| - Good use of appropriate knowledge to develop a logically sequenced answer that |  |
| clearly discusses the use of environmental policies in terms of promoting |  |
| ecologically sustainable development in Australia. |  |$\quad 13-16$

Marks 19-2, 18-5, 17-3, 15-1, 14-1
Median - 18 Mean-17
Comments:

- This question achieved a higher median than Q25 - possibly easier to structure.
- A definition of ecologically sustainable development in Australia was necessary
- Boys continue to write long, descriptive paragraphs with lots of unrelated points - more planning required for some, including keeping sight of what the question is asking


## Background

Ecologically Sustainable Development (ESD) is a situation where the rates of usage of environmental resources by current generations should not compromise the ability of future generations to use or enjoy these resources. The goal of achieving ESD therefore involves achieving intergenerational equity in the use of environmental resources.

Ecologically sustainable development in Australia is a major objective of the Australian government's economic policy. It is linked to environmental sustainability which refers to achieving rates of renewable resource usage, the level of pollution, and the depletion of non-renewable resources that can be continued on a sustainable basis:

- The rate of harvest should not exceed the rate of regeneration
- The rates of pollution and the generation of waste products by households and industry should not exceed the capacity of the environment to assimilate such waste. A sustainable rate and level of waste disposal should be achieved through recycling and the adoption of more efficient and clean technology to reduce carbon pollution.
- The depletion of non-renewable resources (such as coal, oil and gas) should involve the development of renewable substitutes for these resources. The movement to cleaner sources of energy and reduced reliance on coal fired electricity generation is taking place in Australia but at a slower pace compared to other advanced emerging countries.

Different government, both domestically and globally, have regarded this goal with different levels of priority. The case for intervention lies with the concept of market failure; i.e. the market fails to produce socially optimum outcomes with regards to the environment. This is associated with the concept of negative externalities, where the cost of a transaction between the buyer and seller also impacts on a 3rd party; e.g. with pollution.

Kofi Annan (ex UN Secretary-General) described Australia as a 'free rider' with respect to climate change in $6 / 15$ Indeed, the Stern Report (2006) describes climate change as 'the greatest market failure that the world has seen'.

Another damning report was the Garnaut Report (2008). Instigated by the Labour Govt to study the impact of climate change. The report found that the consequences for Australia of doing nothing would be severe including:

- Reduce our GDP by $4.8 \%$, consumption by $5.4 \%$ and real wages by $7.8 \%$ by 2100;
- Cause permanent damage to sensitive areas such as bleaching of the Great Barrier Reef due to rising ocean temps and loss of up to $80 \%$ of Kakadu wetlands;
- Damage to our tourist industry;
- Increased incidence of skin cancer, heat stroke and malaria;
- Increased frequency and duration of drought in southern Australia causing a decline in agricultural production;
- Loss of flora and fauna.

In his final report Professor Garnaut recommended that Australia should immediately express its willingness to reduce carbon pollution by $25 \%$ by the year 2020 as part of a global agreement that stabilises carbon pollution at 450 ppm (parts per million).

Using the stimulus:


Despite increased investment in renewable energy sources, they still only account for 17\% of electricity generation compared to 60\% from coal


The Emissions Reduction Fund is designed to achieve Australia's 2020 emissions reduction target of 5\% below 2000 levels by 2020 and $26 \%-28 \%$ below 2005 emissions by 2030 - does it look like it is working

## POLICY OPTIONS

## International Agreements

Montreal Protocol, 1987
One of first successful global agreements with the banning of cfcs to reduce the hole in the ozone layer. Due to its widespread adoption and implementation, it has been hailed as an example of exceptional international co-operation, with Kofi Annan (then the Secretary-General of the UN) quoted as saying that "perhaps the single most successful international agreement to date has been the Montreal Protocol". It consisted of two ozone treaties, which were ratified by 197 countries and the EU, making them the most widely ratified treaties in United Nations history. Production was phased out by 2000 and the ozone layer should recover to pre-1980 levels by 2050/2065.

Kyoto Protocol, 1997
Kyoto was initially a 160-nation agreement that required industrialised countries to reduce their average national emissions by approx. 5\% below their 1990 levels over the period 2008-2012. Neither Australia, under Howard, nor the USA signed up as both felt that the highest polluting countries (in nominal terms, not per capita - China, India, etc) should have had the highest targets. However, these countries argued against this idea as they said that the problems had been created by western countries in the first place! Rudd did eventually ratify Australia's participation in 2007 as soon as he was elected but it was not turned into domestic law. It has generally been regarded as a very positive step forward for the environment, but many would say it wasn't enough (and some even say it was too much).

## Copenhagen Summit, 2009

This was to negotiate future action following on from the Kyoto Protocol of 1997. Whilst it is true that no legally binding agreement was reached by the 194 countries at the Copenhagen Summit, there were some positives:

- Developed and developing countries have agreed to hold global temp increases to below $2 \%$. This represents the first wide ranging agreement on 'dangerous' climate change
- The fact that both developed AND developing countries have agreed is significant
- Commitment towards transparency made
- Developed countries have agreed to deliver U\$30bn in 2010-2012 to help developing countries and mobilise U\$100bn pa to support such climate change actions
- Encouragement of related new technology and innovation
- Immediate mechanism to reduce emissions from deforestation in developing countries.

So far about 120 countries have pledged their support and these make up $80 \%$ of total world emissions .... so not exactly a 'failure'.
Australia initially pledged to reduce emissions by $5 \%$ of their 2000 level by 2020; this was quite significant as it represents us reducing our emissions by $22 \%$ of the level to which they were projected to have grown. Furthermore, with our rising pop, this is a decrease of $28 \%$ per person/capita. Indeed, as at June 2013, we have made some significant progress towards this goal.

## The Paris Agreement

An historic global climate agreement was agreed to under the United Nations Framework Convention on Climate Change (UNFCCC) at the $21^{\text {st }}$ Conference of the Parties held in Paris from $30^{\text {th }}$ November to $12^{\text {th }}$ December 2015.

The Paris Agreement set in place a framework for all participating countries to take 'climate action' by reducing their greenhouse gas emissions from 2020, building on existing international efforts in the period up to 2020.

Key outcomes of the Paris Agreement (which is a co-ordinated global plan to reduce carbon emissions and adapt to the impacts of climate change) include the following:

- A global goal to hold the average temperature increase to well below $2^{\circ} \mathrm{C}$ and pursue efforts to keep global warming below $1.5^{\circ} \mathrm{C}$ above pre-industrial levels.
- All countries are to set mitigation targets from 2020 and to review targets every five years with a view to increasing them after a global stock take of emissions.
- Robust transparency and accountability rules were drafted to provide confidence in countries' actions and to track progress toward achieving their targets.
- Promoting action to adapt and build resilience to climate impacts such as on agriculture, infrastructure and urban and rural populations.
- Financial, technological and capacity building support to help developing countries implement the Paris Agreement.

The Australian Government has an overall commitment to reduce greenhouse gas emission by $5 \%$ from 2000 levels by 2020. The Australian government's commitment under the Paris Agreement is a target of reducing emissions by $26 \%-28 \%$ below 2005 levels by 2030 .

- Post-2020 emissions reductions targets announced with global average being -37\%, with Switzerland highest at $-51 \%$ and UK $-50 \%$. Australia is well below the average at $-19 \%$. USA is $-43 \%$, EU $-33 \%, N Z-23 \%$ and Canada $-16 \%$.


## Trump's decision of $6 / 17$ to pull the USA out of its commitments so future of this agreement is unclear...

## Other International Agreements that could have been mentioned:

- The World Heritage Convention
- The Antarctic Treaty


## COMMAND AND CONTROL

Much environmental intervention takes the form of legislation to prohibit/limit emissions and other activities, which deals with the problem directly. However, some (economists) say that regulation does not give the best trade-off between eco growth and env quality as it does not create incentives to find cheaper ways of reducing env damage.

Successful examples include:

- Global banning of cfcs at the Montreal Protocol in 1987 (see Montreal Protocol)
- Banning of leaded petrol by the Aust govt, phased out by 2002
- Setting targets; eg Australia had a renewable energy target (RET) of 20\% of all energy consumed by 2020. But has in $5 / 15$ been reduced from 41,000 gigawatt hours to 33,000 gigawatt hours; ie decrease to $16 \%$. Also we have pledged to $\downarrow$ our carbon emissions by $26-28 \%$ by 2030 from 2005c levels (see Paris Agreement)


## ECONOMIC INSTRUMENTS

Can take several forms including:

- Subsidies; e.g. of renewable resources as per 2010/11 budget which allocated $\$ 652$ $m$ to the Renewable Energy Fund/Clean Energy Future. This was confirmed in the following budget but severe cutbacks under Abbott;
- Refundable Deposit Schemes; e.g. South Australia's scheme for bottle re-cycling;
- Taxation to discourage production and/or consumption by raising prices. Also known as the 'polluter-pays' principle, although obviously prices can be passed on to consumers but it does give producers incentive to cut emissions. Also yields revenue for govt. Carbon Tax (2012) was an example - See notes from Topic 3: Eco Issues; Chap 12: Env Sustainability;
- Tradable Permits where govt sets pollution 'limit' and firms are awarded or bid for permits at auction. Again, gives firms incentive to cut emissions with potential to resell permits to firms in need and gives govt revenue source - See notes from Topic 3: Eco Issues; Chap 12: Env Sustainability;
- Creation of Property Rights where govts legislate to create private property rights over environmental assets (eg fishing licences/quotas). Buyers of the asset have a proprietary interest in preserving the asset and avoiding exploitation through underpricing but system may not be practical or politically acceptable.


## Australia's Environmental Sustainability Policy \& Legislation

The Australian Government has an Environmental Sustainability Policy which covers issues such as the following:

- Energy use
- Greenhouse gas emissions and ozone depleting substances
- Suppliers, products and materials use
- Office waste, building waste, and resource recovery
- Potable water use and waste water

Specific Australian government legislation and policies that are relevant to energy use, greenhouse gas emissions and ozone depleting substances include the following:

- The Environment Protection and Biodiversity Act 2010
- The Ozone Protection and Synthetic Greenhouse Gas Management Amendment Act 2010

The Rudd Labor government ratified the Kyoto Protocol in December 2007 and announced major new environmental policies in the 2008-09 and 2009-10 budgets. These included the introduction of an emissions trading scheme (the Carbon Pollution Reduction Scheme) by 2010-11 to reduce greenhouse gas emissions by $60 \%$ on 2000 levels, by 2050; a Renewable Energy Target of $20 \%$ of electricity generated by renewable sources by 2020; a ten year \$12.9b national water policy called Water for the Future; and a \$4.5b Clean Energy Initiative to develop renewable sources of energy. However, the CPRS legislation was not passed by the federal parliament. In the 2010-11 budget the government introduced the Renewable Energy Future Fund ( $\$ 652 \mathrm{~m}$ ) to reduce reliance on fossil fuels, by supporting renewable energy projects in wind, solar and biomass.

In the 2012-13 budget the Gillard government introduced a $\$ 23$ per tonne carbon tax on the 500 biggest emitters in industry, rising by 5\% per year until Australia switched to an emissions trading scheme on July $1^{\text {st }} 2015$. The carbon tax was repealed by the Abbott government in July 2014 and replaced by a policy of Direct Action based on a $\$ 2.5$ bemissions Reduction Fund.

## DIRECT ACTION PLAN, 2014

The former Abbott government abolished the carbon tax with effect from $1^{\text {st }}$ July 2014. Coalition government under Prime Minister Malcolm Turnbull has used a Direct Action Plan to reduce carbon emissions. This is being done primarily through the Emissions Reduction Fund.

- Does not include any specific long-term targets but expected to meet previous Govt's commitment to $\downarrow$ Australia's greenhouse gas emissions by $5 \%$ (on year 2000 levels) by 2020, at the lowest cost
- Centrepiece is the Emissions Reductions Fund (ERF) - $\$ 2.55$ bn over 4 years for firms as an incentive to meet or fall below their long-term average direct emissions rate - Initially there was creation of a $\$ 525$ m 'Green Army' - 15,000 people by 2018 earning between $\$ 10$ - $\$ 16$ per hour (which is < min wage of $\$ 16.87$ per hour but > Newstart Allowance/Dole of $\$ 255.25 \mathrm{pw}$ ) to undertake environmental projects (now disbanded)
- Talk of new targets of LET (low emissions target) or even a CET (clean emissions target)


## The Finkel Review - CET

Australia's Chief Scientist, Alan Finkel delivered a review of Australia's electricity market in June 2017. The Finkel Review argued for the adoption of a Clean Energy Target to increase the amount of electricity generated from renewable sources by 2030.

The issues of global environmental sustainability and climate change reached a heightened level of awareness and debate in September 2019:

- Firstly, there was a global Climate Strike on September 20
- Secondly, the United Nations held a Climate Change Summit
- Thirdly, the UN Intergovernmental Panel on Climate Change (IPCC) released an updated report which suggested that temperatures and greenhouse gas emissions have risen in the last five years and governments need to slash emissions.

Scott Morrison was in the USA for talks with the Trump Administration. He did not attend the UN Climate Change Summit and was criticised by opponents for not being proactive in promoting policies to address climate change.

One of the fundamental changes in the Australian government's environmental policies is to link the issue of energy security with the government's commitment to reducing greenhouse gas emissions. This change was embodied in the previous policy of the Turnbull government called the National Energy Guarantee.

## The National Energy Guarantee (NEG) - didn't get through Parliament

The National Energy Guarantee (NEG) policy of the Turnbull government in 2018 involved changes to the national electricity market with the following priorities:

- Maintaining the reliability of the electricity system to avoid power blackouts
- Achieving electricity sector emissions reductions to meet Australia's international commitment under the Paris Agreement (2015) to reduce greenhouse emissions by between $26-28 \%$ by 2030
- Lowering the costs of energy and power bills to households by an average of $\$ 550$ per year.


## The Climate Solutions Package

In the 2019-20 budget, $\$ 3.5 \mathrm{~b}$ in funding was announced for a Climate Solutions Package to achieve a more affordable, reliable and sustainable energy system. One of the main problems that the Australian government faces in reducing emissions is that there is no explicit carbon price or tax on carbon emissions like the previous carbon tax under the Gillard government.

- Providing a $\$ 2 \mathrm{~b}$ Climate Solutions Fund to reduce greenhouse gases through the Emissions Reduction Fund
- Securing energy reliability through investment in an expansion of the Snowy Mountains Scheme (Snowy 2.0), designed to deliver more affordable and reliable power to the National Electricity Market
- Helping households and businesses to improve energy efficiency and achieve lower energy bills
- Developing a National Electric Vehicle Strategy to develop new vehicle technology and infrastructure
- Achieving 'green and clean' local environments by supporting local communities.

Table 1: Environmental Targets of the Australian Government

- Reducing emissions by $5 \%$ below 2000 levels by 2020
- Reducing emissions by $26 \%$ to $28 \%$ below 2005 levels by 2030
- A Renewable Energy Target of 23\% of Australia's electricity supply in 2020 to be delivered by renewable energy

The Emissions Reduction Fund is designed to achieve Australia's 2020 emissions reduction target of $5 \%$ below 2000 levels by 2020 and $26 \%-28 \%$ below 2005 emissions by 2030 .

Whilst the Australian government has a policy to reduce carbon emissions and increase the use of renewable energy, many argue that these policies are not ambitious enough and do not provide sufficient incentives for investment in renewable energy. However, the market has responded to the use of renewable energy such as wind and solar power.

Despite increased investment in renewable energy sources, they still only account for $17 \%$ of electricity generation compared to $60 \%$ from coal (stimulus). The coal lobby is very powerful in Australia and has sought to get government support for new mines (such as Adani coal mine) and increased exports of coal to large emerging countries such as China and India. This in effect means that Australia is exporting coal to countries which already have very high shares of global emissions and Australia has very high per capita emissions which makes the transition to a low emissions economy costly.

## The Great Barrier Reef

A crucial issue in Australia achieving environmental sustainability in the long term is the protection of the Great Barrier Reef. Scientists had predicted that climate change would lead to warmer oceans and increase the frequency of mass coral bleaching events. This occurred on a mass scale in 201617 on the Great Barrier Reef. This is documented in the Great Barrier Reef Outlook Report 2019. The only solution to preserving the Great Barrier Reef is global action to reduce climate change.

Final note - there is a lot to write about but it is fairly simple to structure.
SD
8/2020

## TRIAL 2020

## 27. Examine the impacts of globalisation on the global economy.

| Criteria | Marks |
| :---: | :---: |
| - Demonstrates factually precise and extensive knowledge to develop a logically sequenced answer that clearly examines the impacts of globalisation on the global economy in detail <br> - Uses relevant data to support a contemporary and comprehensive examination of the impacts <br> - Integrates economic terms, concepts, issues, relationships and theory in a highly competent manner | 17-20 |
| - Good use of appropriate knowledge to develop an answer that examines the impacts of globalisation on the global economy <br> - Uses relevant data to support an examination of the impacts but lacks depth <br> - Good use of economic terms and applies economic concepts and relationships | 13-16 |
| - Uses correct and usually relevant information to demonstrate some knowledge and understanding of the impacts of globalisation on the global economy <br> - The examination of the impacts is flawed in places, detracting from the quality of the response <br> - The use of economic terms and economic concepts and relationships shows some weaknesses in understanding | 9-12 |
| - Lacking any real development on the impacts of globalisation on the global economy <br> - Makes minimal use of data to support discussion <br> - The use of relevant economic terms, concepts and relationships is limited | 5-8 |
| - A response that reflects a standard barely above a non-attempt | 1-4 |

Number: x 26; Mean: 14.1; Median 14.
Range: $18 \times 1 ; 17 \times 1 ; 16 \times 5 ; 15 \times 5 ; 14 \times 4 ; 13 \times 3 ; 12 \times 5 ; 11 \times 2$.

## Comments:

- I have provided plenty of material for you to consider below but certainly was not expecting responses to cover all of these impacts in anything like this detail. I wanted to show you ways to enhance the depth of your analysis
- The question asks you to consider the impacts of globalisation on the state of the global economy and so it was important to consider both the positives and the negatives
- Better responses did go into detail on many of the impacts and made a genuine effort to link their work to the state of the global economy. In doing so they referred to key indicators such as world growth (GWP), development (HDI and inequalities, etc), trade, etc
- These responses showed a comprehensive knowledge of impacts and supported their points with good use of stats and examples
- Weaker responses tended to generalise too much and provided a descriptive account rather than a comprehensive analysis. Also tended not to refer to
statistics and/or examples and often presented only one side to the relevant impacts.
- Some boys only used data and egs from China and/or Australia. Whilst I would do so if I had nothing else, I would try to make it less obvious by including a few other global egs at least!
- Most worked appropriately w COVID-19 impacts; obviously it can't be ignored but nor should it be the focus. I think around $20 \%$ of your response is appropriate/max?
- Finally, the usual reminders (can't believe I have to keep doing this but...!!)
- Keep intros short and sweet w a definition and a brief allusion to the $q$ but don't go overboard w details or a definitive answer to the $q$
- $2^{\text {nd }}$ para some general stats related to the $q$
- Then get into the response details
- Short conclusion needed
- SHORT SENTENCES!
- SHORT PARAGRAPHS!!
- LOTS OF STATS \&/OR EGS!!!


## Answers could include:

## INTRODUCTION

- Define globalisation
- General statement recognising the (growing) dominance of the concept in last few decades but possibly faltering recently
- General statement on the many impacts it has (ie many dimensions) both + and -


## SPECIFIC IMPACTS OF GLOBALISATION

1) Growth (Also see 2) Int Business Cycle)

- The impact of globalisation on growth has been varied. In overall terms, world growth was $2.9 \%$ in the 1990's compared to $3.2 \%$ in the 1980's despite closer integration. During the first half of the first decade in 2000, growth increased back to $3.2 \%$ but the GFC had big slowing impact. $2000-2018 \mathrm{av}=2.8 \%$
- GWP was US $\$ 88 \mathrm{tn}$ in 2018
- IMF estimates this year will fall by $5 \%$ but developing Asian ecos by only $1 \%$
- Some countries have gained more than others, of course. Developing and Emerging Economies have greater opportunities with increased access to world markets and new technology, the latter being the influence of Trans National Corporations (TNCs). In other words, they are playing 'catch up' to the High Income countries
- Prospects for global growth have deteriorated over the past two years, as financial sector deleveraging has continued and producer and consumer confidence have fallen. Further global action to support financial markets and provide further fiscal stimulus and monetary easing may be needed to limit the decline in world growth. Not helped by US-China trade war
- Here are the RBA's latest graphs:


## GDP Growth - World

Year-ended

*. Weighted using Australian export shares
** PPP-weighted; accounts for 85 per cent of world GDP
Sources: ABS: CEIC Data: IMF: RBA: Refinitiv


2) The International Business Cycle

- The major phases of the International business cycle are identical to those of national business cycles. However, with the international business cycle it is important to consider:
- Leading Economies: The large industrialised economies which dominate global output and policy, plus the emerging economies of both China and India have the capacity to lead the business cycle.
- Lagging economies: These economies respond to and are influenced by changes in the global economy, and their domestic trends in growth follow behind (or lag) global trends. These are typically nations with reduced exposure to the global economy, trade and portfolio investment.
- External Shocks: Often trends in the international business cycle are not driven by economic fundamentals or indicators, but rather single events that have wider ramifications. Think of events such as stock market crashes, currency collapses, war or terrorism and, of course, COVID-19
- Contagion Effects: The important issue here is the ability of economic events (especially negative ones) to transmit through the global economy like a virus. Think about the GFC of 2007/8 and COVID-19


## 3) Development

- Economic growth has a strong relationship with development as it allows more funds to be used in education, health, infrastructure, etc. However, it can have a negative influence on issues such as the distribution of income and the environment (in terms of destroying natural habitats \& using non-renewable resources)
- China has gained massively in terms of development as a result of it embracing globalisation and enjoying huge growth rates. However, it still has some way to go in terms of many indicators including those mentioned above. HDI in 2018 was 0.758 (rank 85/189) but was only 0.59 in 2000 and 0.5 in 1990
- Almost all countries have experienced positive increases in HDI since 1975. The few that haven't are characterised by massive political upheaval; e.g. Zimbabwe and Afghanistan
- Check the most recent UNDP report for figures


## 4) Trade

- The growth in global trade is generally more than double the level of world GDP growth. Now trade is equal to around $66.66 \%$ of global output. This reflects the big trend towards specialisation which means countries are now more reliant on others than ever
- GWP is now $\times 50$ its size in 1960 but trade has grown by $\times 125$
- Major factors behind growth in trade inc technology, transport and communication improvements plus growth in trade agreements
- Obviously, there are a number of exogenous factors that influence the level of trade: in general, the growth of global trade tends to contract faster than world eco output. This highlights greater volatility.
- Trade direction and composition have also altered with greater focus on emerging ecos; their share of world $X$ has increased from $7 \%$ in 1995 to $18 \%$ in 2017, whilst High $Y$ countries' share has fallen from $82 \%$ to $68 \%$ (= share NOT nominal amounts)
- Composition dominated still by manufactures (1995: 62\% of global trade; 2017: 55\%) but fuels and minerals ( $7 \%$ to 12\%) and services (19\% to 23\%) becoming increasingly important
- Vertical specialisation/Global Supply Chain is another key trend with different stages of manufacturing now being undertaken by different countries; e.g. iPhones assembled in China but casing is from Taiwan, screens from Korea, chips from USA and China, etc.


Source: WTO \& IMF
5) International Investment

- Foreign Direct Investment (FDI) refers to investment which is directly related to economic activity or in the purchase ( $>10 \%$ of total value of shares) of companies. It often involves either mergers (equal share) or takeovers (where one firm consumes another) and is most often undertaken by Transnational Corporations (TNCs). Worth US\$1.43tn in 2018
- According to estimates by UNCTAD (2016), TNCs now span some 104,000 parent companies with foreign affiliates accounting for $33.3 \%$ of total world X and employ over 73 m . They produce $25 \%$ of total GWP. Many TNCs have greater GDP than several countries (e.g. General Motors is bigger than Belgium).
- In recent years the areas of greatest new investment have been into the emerging markets in Asia, South America and the countries of the former USSR
- Some discussion of the ads and disads of TNCs needed here (employment and tax revenue for govts vs labour standards and environmental issues, etc)


## 6) International Financial Flows

- International financial flows have grown most rapidly of all, at 10 times the rate of GWP. This revolves around Portfolio Investment, which refers to trade in shares, etc which is $<10 \%$ of the total in the relevant company. The growth is due to financial market deregulation and increases in superannuation balances around the world. Most Australian workers will own shares in other countries depending on their preferred destination of their super funds
- Global finance overall is US\$98tn
- Since the phasing out of controls on foreign exchange trading in the 1970's, international financial flows have grown exponentially
- In 1980 global foreign exchange trading was 10 times the value of world trade. Foreign exchange trading is now estimated to be more than 100 times the value of world trade and growing. Av daily turnover is now over US $\$ 5.2 \mathrm{tn}$. The level and direction of international financial flows are now the main determinants of the value of most nations' exchange rates
- Trade in goods and services has little impact on the exchange rate today, except perhaps as a psychological influence on the behaviour of international financial traders. Indeed, only $1-5 \%$ of the foreign exchange market involves payment for trade $w$ speculation making up the rest
- Financial flows take many forms. The fastest growing area has involved interest rate, credit, currency, equity, and commodity derivatives. Interest rate, credit and currency derivatives make up over $90 \%$ of the total value of derivatives traded. Exchange-Traded Derivatives had reached U\$ 57 trillion in 2010, almost the size of gross world product! The turnover in the derivatives markets is now much larger than the cash markets


## 7) Technology, Transport \& Communication

- Linked to growth of TNCs.
- New information and communication technologies are driving globalisation. The cost of global communication is declining and innovative tools are becoming easier to use. Containerisation, the Internet, mobile phones and electronic funds transfer are opening up the global market place.
- Improved communication can foster great advances in health care and education. It also breaks down barriers of size, time, and distance. Costs are falling for small firms as they move from domestic markets to global
- Consumers can purchase products from any country in the world through the internet and Australia producers have to compete against the prices that are on offer there. The internet does, however, open the door for innovative Australian producers to reach a much larger market place and take advantage of economies of scale.
- Improvements in technology also bring up the issue of intellectual property rights. Tighter property rights are increasing the price of technology transfer, blocking many developing countries from their use, whether it is in production, communication, education or health care. This in turn increases the power and wealth of those who largely own the property rights, the transnational corporations.


## 8) Labour

- The international movement of labour has been growing since the 1960's. The World Bank reports that almost 165 million people ( $3 \%$ of the world's population) have migrated to work in different countries to their bith.
- Employees in advanced economies are facing insecurity and are less likely to press for higher wages knowing that production processes are being transferred
- It is true that there has been some contraction in employment in labour intensive industries such as textiles and footwear in rich countries over the past 20 years as production has moved to countries in which labour is cheaper. However, this is part of the process of development and structural change
- The movement of labour between economies appears to be concentrated at the top and bottom ends of the market. Highly skilled workers are being attracted to the richest economies such as the US and in Europe hence the 'brain drain' affecting Australia, rather than 'brain gain' - USA)
- Similarly, a trend for low skilled workers from the less developed world to fill the bottom end of the labour market is developing in Europe and the US
- There still remain significant barriers to the globalisation of labour as a result of immigration restrictions, language, cultural and educational barriers. This has resulted in a shift of business to where cheaper labour exists.


## 9) Environment

- The substantial increase in global growth over the past 20 years has given cause for much concern over the impact on the global environment
- The world's natural environment is being threatened in many ways, - the extinction of fauna and flora, the desertification of land, dry land salinity, pollution of waterways etc
- Climate change as a result of the impact of human activity has become a major concern for the global community. The rapid expansion of world output
- Av rise in CO2 emissions from 2001-2025 is $1.9 \%$ but China and India will average $2.7 \%$ pa. These stats are NOT compatible w Paris agreement to keep temp rises to $1.5 \%$ max; ie dependency on fossil fuel technology is a long way from being resolved
- The movement of manufacturing into regions of the world with poor records of environmental protection can only increase the pressures being placed on the global environment
- Some hope through global agreements such as Kyoto Protocol and the Paris summit but agreements between developed, emerging and developing economies is v difficult, esp w USA's intransigence

10) Global Inequality

- The gap between the rich \& poor nations is narrowing, however, offsetting this trend is the widening of $Y$ distribution particularly in China. The gap between rural and urban incomes is of particular concern. 24 of the developing countries of the world have doubled their trade to GDP in the past 20 years.
- Clearly some regions have been left behind. Two thirds of the developing countries (around 2 billion) remain dominated by agricultural activity, poor infrastructure, weak institutions and corruption
- Y ineq rose by $0.45 \%$ in 30 years til mid 2000 s of which $20 \%$ was caused by globalisation (IMF)
- 1.2 billion people (approx. 20\% of the world's population) still live on less than U\$1.25 a day, although this has come down from 1.4 billion since 1980 as a result of policies such as the World Bank's Heavily Indebted Poor Countries Initiative which aims to reduce debt by $66 \%$ in 46 of the world's poorest countries; e.g. African, South Asian and Latin American. By 2018, 36 countries were expected to save U\$99 billion in debt relief


## SUMMARY: GLOBALISATION - THE PROS AND CONS:

## The Positives:

1. Provides the best opportunity for all nations to become efficient by specialising in the industries they are most adept at.
2. Increased competition and pressures to innovate, and therefore the encouragement of improved efficiency and heightened living standards.
3. Removes the distortions created by keeping markets closed to outside investors and producers.
4. Associated with higher economic growth rates.
5. Provides individuals with greater consumer sovereignty in where they live, travel, what they do, experiences and consumption.
6. Encourages FDI through TNC'S which helps achieve faster economic development, the introduction of new technologies, improved workforce skills, better infrastructure and communication systems.

## The Negatives:

1. Inequity, as it systematically works to entrench the divisions between the richer and poorer nations.
2. It widens income inequalities between nations and within them.
3. Is associated with environmental degradation and exhaustion of non-renewable resources.
4. May undermine local cultures replacing them with generic consumer cultures.
5. Creates massive social upheaval in developing economies as they struggle to industrialise, resulting in large people movements from rural to urban areas. This impacts on traditional values and communities.
6. Replaces local businesses which invest back into the country with TNCs who send their profits back to their parent country. They do not cater for the needs of locals in developing economies.
7. Results in smaller nations losing sovereignty over the futures as their economies become more dominated by TNC'S and control of key economic decision making (micro and macro policies) slips into foreign hands.

## CONCLUSION

A brief re-statement of the main themes/impacts
Some additional reading/info from 6/20:

# 楼 <br> plain-english economics 

## Topic eight: Globalisation

Economies around the globe have always been linked in some form. However, it is apparent now, more than ever before, that the nature and process of production is not confined within national boundaries. Increasingly. firms operate with a global perspective, not onty in selling products to multiple nations, but also in shifting production to tocations around the globe that offer the best prospects for cost minimisation and productivity. This has been parsicularly common in the information technology industry and in telephone call centre support. The growing dominance of multi-national corporations and the corresponding decline of locally based lirms is one of the most observatile impacts of globallsation.

Undoubtedly technology has played a strong role in the acceleration of globalisation. Enhanced communitation and travel have made it possible for economic agents to be managed regardless of physical location. The same technology has facilitated a convergence of consumer preferences and trends; and has made the quiek replication of worldwide best practice production techniques between firms possible.
Nofwithstanding the dominance of the longerterm trend towards globalisation, there have been some recent signs of a slowing and perhaps partial reversal of this trend. Over the past decade the pace of progress on the removal trade barriers has slowed and more recently the US - Chind trade dispute and the COVID-19 crisis have been a challenge to the globalisation trend.

## The global shift to free trade

In addition to the role played by technology, another significant driver of globalisation has been the ongoing shift towards free trade. The economic rationale for free trade is well documented and has support from Governments around the globe. However, there is not necessarily a benefit if a nation removes trade
protection measures itself without reciprocal removal of trade barriers by others. Therefore, the shift to free trade is often performed under agreements that are billateral (betvreen two nations) or multi lateral (between many nations).

The body that co-ordinates and enforces multilateral agreements is the World Trade Organisation (WTO), Any country having full autonomy in the conduct of its trade policies may become a member of the WTO. subject io the agreement of the member nations. The inclusion of communist ruled China as a member in 2001 was significant not only due to the size of the Chinese economy, but also berause it is indicative of the widespread support for free irade principles across the political spectrum. There are currently 164 nations being members of the WTO, who represent $98 \%$ of global trade.

Mernbers of the wTO have been negotiating the "Doha" agenda of free trade initiatives since 2001. The Doha agenda covers agreements in agriculture, manufacturing (where there is a zero tariff target) and for the first time there is a significant focus on trade in services. Progress on the agreement has been slow but there remains a commitment by the G20 Group of Nations to complete the negotiations. The WTO described this initiative as "one of the biggest reforms of the WTO since its establishment in $1995^{*}$ with potential cost reductions in trade of between $10 \%$ and $15 \%$.
Free trade has encouraged the growth of trade volumes between nations. The WTO reports that in 2019, some SUS 18,780 bxilion in merchandise exports were sold across the globe. This was $2.8 \%$ below the value of trade in 2018 and is consistent with some broader slowing in the pace of trade growth in recent years. As the chart below showrs, over the past 5 -years, irade growth rates have been bebow global economic Browth rates. This contrases with previous periods when trade was growing significantly faster than economic growth (GOP).

sowir virta imes

Periods of low rates of economic growth, which have prevailed in many developed economies since the GFC, may have made it more difficult for governments to reach new trade agrecments, whilst there has been an increase in sade protection measuras in some areas. In recent times, the United States has withdrawn from the Trans Pacific Partnership trade agreement. The U.S has also impdemented a widespread program of larifts at the rate of $25 \%$ on a range of imports from China. Subsequent to this, China has responded with tantis on imports frem the U.S., ircluding ear and agriculture items.

Potentially further adding to a slowdown in future global trade volumes was the referendum outcome in the United Kingdom (U.K) in June 2016. U.K. citizens voted for the U.K. to leave the furopean Union, therety exiting the European free trade zome.

## Growth In Australian free trade

Australia has long been an active supporter of fece trade. Over the past 3 decader, Australia has removed many forms of Indusiry protection as well as being a kev participant in bilateral and multi literal trade agreements. In particular, significant reductions in protection have taken place in manulacturing. In the early 1970s. tariffs imposed on manufacturing imports were typically 22\%. These tarills have progressively decllned and in many cases have been removed.
Small tarifls of $5 \%$ remain in some sectors such as the Textile. Clothing and Footvrear (TCF) and Motor Vehicle industries. In the Motor Vehicte industry, tariffs were previousiy more than $50 \%$. All major motor vehicle manulacturers have now ceased production in Australia.

Consistent with the longer-lerm trend overseas, Australian international trade has risen at a faster rate than the economy generally. The chart below shows how the ratio of exports and imports to GOP has increased over the past 60 years. Both trade varibbles have signiflcantly increased since the 1980s.


Blateral \& Reglonal Arrangements
in addition to its involvement in the WTO. Australla has been active in negotiating bilateral and regionally based trade arrangements. A summary of key inllatives is provided below:


















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## TRIAL 2020

## 28. Examine the factors influencing the changing nature of Australia's external stability.

| Criteria | Marks |
| :--- | :---: | :---: |
| -Demonstrates extensive knowledge to develop a logically sequenced answer that <br> examines the factors influencing the changing nature of Australia's external <br> stability | $17-20$ |
| - Uses relevant data to support a contemporary \& comprehensive examination |  |
| - Integrates economic terms, concepts, issues, relationships and theory in a highly |  |
| competent manner |  |$\quad$| - Good use of appropriate knowledge to develop a logically sequenced answer that |
| :--- |
| clearly examines the factors influencing the changing nature of Australia's |
| external stability |$\quad 13-16$

Number: x 46; Mean: 15.6; Median 16.
Range: $20 \times 2 ; 19 \times 3 ; 18 \times 5 ; 17 \times 8 ; 16 \times 10 ; 15 \times 6 ; 14 \times 5 ; 13 \times 4 ; 12 \times 3$.

## Comments:

- I have provided plenty of material for you to consider below but certainly was not expecting responses to cover all of these impacts in anything like this detail. I wanted to show you ways to enhance the depth of your analysis
- Many could not define external stability well
- Even more could not identify the 3 components that are considered when judging external stability...a BIG worry
- This $q$ has a 'factors' focus but many wrote only about the 'changes'
- Better responses did go into detail on many of the factors and made a genuine effort to link them to the changing nature of external stability
- These responses showed a comprehensive knowledge of factors and supported their points with good use of stats and examples
- Weaker responses tended to generalise too much and provided a descriptive account rather than a comprehensive examination. Also some only focused on one component rather than all 3 and/or tended not to refer to statistics and/or examples
- Most worked appropriately w COVID-19 impacts; obviously it can't be ignored bur nor should it be the focus. I think around $20 \%$ of your response is appropriate/max?
- Finally, the usual reminders (can't believe I have to keep doing this but. ..!!)
- Keep intros short and sweet $w$ a definition and a brief allusion to the $q$ but don't go overboard $w$ details or a definitive answer to the $q$
- $\quad 2^{\text {nd }}$ para some general stats related to the q
- Then get into the response details
- Short conclusion needed
- SHORT SENTENCES!
- SHORT PARAGRAPHS!!
- LOTS OF STATS \&/OR EGS!!!


## Answers could include:

## Introduction

- Define external stability - ie if we can meet our financial obligations to overseas
- List the 3 components - CAD/S, NFL/D/E \& A\$
- Brief re-statement of the question


## 1) Current Account Deficit/Surplus



Terms of Trade*




## CURRENT ACCOUNT OVER LAST 10 YEARS

While Australia's Current Account has consistently been in deficit until last year, the size of the deficit has fluctuated significantly with economic cycles. Typically, the deficit has expanded during times of strong economic growth. Over the past decade, however, dramatic movements in commodity prices have tended to dominate BOGS balances. Growing global demand for items that Australia exports has seen export receipts increase strongly. Initially, rising commodity prices pushed export receipts higher. It has been increased volumes of mining output that has supported export revenue recently (AUD depreciation). Australia has previously run large deficits on the Services Account. However, growth in income from industries such as tourism and education to overseas students, has helped keep the Services Account in modest surplus or a small deficit in recent years:

The Current Account deficit then contracted sharply and in March 2017 was just $0.7 \%$ of Gross Domestic Product (GDP). This compares with larger deficits of approximately 3\% to 5\% of GDP over much of 2010 to 2016.

Australia's current account surplus widened sharply to AUD 8.40 billion in the first quarter of 2020 from an upwardly revised AUD 1.72 billion in the previous quarter and beating market expectations of AUD 6.3 billion. This was the largest current account surplus on record, as the goods surplus jumped to AUD 19.30 billion from AUD 13.43 billion in the previous three-month period as imports dropped mostly due to February's supply chain disruption in China amid the coronavirus pandemic while exports rose. In addition, the primary income gap dropped to AUD 10.61 billion from AUD 11.43 billion in the prior quarter, and the secondary income deficit narrowed to AUD 0.18 billion from AUD 0.40 billion. Meantime, the services account posted a deficit of AUD 0.11 billion, swinging from an AUD 0.13 billion surplus in the previous period.

## Cyclical

Changes in the terms of trade.
Levels of domestic growth.
Level of growth in trading partners - China.
Exogenous factors (outside of control); e.g. drought.
Exchange rate fluctuations

## Structural

Past CADs and existing debt levels (possible debt trap scenario) ... H/Hold debt alone is at a record high of $177 \%$ of $\mathrm{H} /$ Hold Y
Australia's low level of national savings - S/I gap but PITCHFORD??!!
Australia's narrow production and export base.
Greater international competitiveness needed (price \& quality); hinges on low domestic inflation.
Natural endowment of minerals resources.

## 2) $\mathrm{NFL} / \mathrm{D} / \mathrm{E}$

The largest contributor to Australia's Current Account deficit is the high negative balance on the Income Account. The deficit on the incomes account has increased recently as the size of Australia's foreign debt has increased.

Australia's net foreign liabilities are in the form of debt rather than equity. Equity is 'negative' in that we own more overseas assets than overseas own ours! Mainly due to our compulsory super levy of $9.5 \%$ (and current debate re increasing it to $10 \%$ next year and to $12 \%$ over next 5 years ...but too expensive for firms?)

Net Foreign Liabilities
By type, per cent of nominal GDP


* Short-term includes debt with residual maturity of one year or less; long-lemm includes all other debt
Source: ABS

3) $\mathrm{A} \$$


The GFC in 2007-8 led to a depreciation in the real exchange rate, The European Sovereign debt crisis caused another depreciation between May \& July 2010. The Australian dollar recovered during 2011 (commodity prices, TOT improvement, interest rate differential) trading @ \$US1.05. By 2015-16 AUD depreciated and has been between \$US 0.72 and $\$$ US0. 78 since (slow world growth, cuts to interest rates, shifts in commodity prices and TOT)

Australia is susceptible to exchange rate fluctuations and a depreciation may contribute to:

- Volume effect: Improvement in international competitiveness (impact on BOGS, particularly growth in services exports very recently). According to the Marshall-Lerner Condition, a depreciation will only improve the BOGS id PED for $\mathrm{X}+\mathrm{PED}$ for $\mathrm{M}>1$
- Valuation effect on that part of foreign debt denominated in foreign currency. This is offset by hedging and swapping of loans so that almost $80 \%$ are now denominated in A\$. Also now offset by dividends from foreign assets owned by Australians. Composition of NFL and mix of denominations of debt will contribute to the movement in CAD as \% GDP


## Overall

## From RBA speech about our external position in April 2017:

The narrowing in the net income deficit from late 2010 to late 2013 mostly reflected a decline in income payments on Australians' foreign debt and equity liabilities. ${ }^{[8]}$ The lower average yield paid on Australian foreign debt was due to a combination of declines in Australian interest rates and an increase in the share of Australia's foreign debt attributable to the Australian Government, which pays a lower rate of interest than private sector borrowers. The decline in the payments on equity liabilities was a result of lower profitability of the mining sector. Because Australia's mining sector is majority foreign owned, a reduction in the profitability of that sector gives rise to smaller payments to the foreign owners, either in the form of dividend payments or reinvested earnings, thereby reducing the net income deficit.
Since 2013, the reduction in the net income deficit has instead reflected an increase in returns on Australian residents' offshore equity holdings. These increased returns are directly related to the determinants of the shift towards a net equity asset position namely, continued flows into offshore equity by Australian superannuation funds and the depreciation of the exchange rate, which increases the Australian dollar value of dividend receipts.

In the most recent national accounts, profits of private corporations rose by more than 15 per cent - the second largest increase in the history of the accounts - driven by a huge rise in profitability in the mining sector, in turn a reflection of the recent sharp rise in the prices of coal and iron ore. Based on company announcements, some of these profits are likely to be distributed to foreign owners as dividends. Moreover, to the extent that mining sector profits remain high over the next quarter or so, we could expect to see income outflows as these profits are distributed to foreign owners, all other things being equal. This is likely to increase the net income deficit in coming quarters, but not contribute to gross capital inflows to the mining sector, in contrast to previous periods of high profitability, when profits were reinvested to fund increased investment spending.

## Some noteworthy trends:

Firstly, sizeable capital inflows have continued to fund mining investment, in particular large LNG projects. Whereas these (notional) flows during the mining investment boom mostly reflected reinvested earnings, much of the more recent flows have been (actual) transfers from offshore affiliates. As these LNG projects transition into the production and export phase, we would expect to see these inflows moderate. Moreover, some of these profits are likely to be paid out to offshore owners as dividends rather than reinvested. Secondly, there has been continued appetite from foreign investors for Australian government debt, but this needs to be measured carefully given the increased participation of foreign investors in the domestic repo market. The third development has been the continuation of little net capital flows either to or from the banking sector, but within that, a notable change in the composition of the investor base, particularly for short-term debt.

## External stability outlook

Since the 1990's, Australian's external stability has not been a matter of significant concern. In contrast to many other developed nations, the economy has experienced consistent growth, Government debt has been low and will remain relatively low despite the COVID-19 policies. The currency remains relatively strong. However, discussed below and in the following 'Plain English' are some factors that could potentially cause future disruption to external stability:

- The vicious trade deficit - debt cycle

The high foreign debt means any further significant improvement in the Current Account leads to higher interest payments, which leads to a higher Current Account deficit, requiring more debt. A rise in interest rates, or a fall in the value of the $\$ \mathrm{~A}$, could exacerbate this cycle

- A correction in the terms of trade

Over recent years Australia's Terms of Trade has been at relatively high levels.
Nonetheless, the Australian economy is vulnerable to further downward shifts, when
commodity prices fall

- Weak non-mineral exports and resurgence of imports

Would set the BOGs and CAS back

- High dependence on China

If China sneezes, Australia catches pneumonia....???
Conclusion

- Brief re-statement of your main points and themes


#  plain-english economics 

## Topic two: External stability

As Australia has experienced generally positive economic growth and has benefited from the minine, boom over recent vears, there has been improvement across measures of external stability. A summary of recent trends in these measures is provided bedow.

## 1. Current Account

Australia's Current Account position has fluctuated significantly with economic cycles and since mid- 2019 has been in a supplus position for the first time since 2975. Typitally, the Curent sccount has deteriorated during times of strong economic growth. This is beceluse in times of growth, high owerall spending causes import tevels to increase by more than exports. The teverse is true when growth is weak.

Over the past detade, however, dramatic movements in commodity prices have tended to outweigh domestic influences on the trade accounts. Growing global demand for items that Australia exports has seen export receipts increase strongly. Initially, rising commodity prices pushed export receipts higher. In more recent years, an increased volume of mining output has coincided with strong prices to support export receipts.


In March 2020, the quarterly Current sccount surplus was equivalent :o $1.7 \%$ of Gross Donestic Product (GDP). This compares with : deficit equivalent to $0.6 \%$ of GOP one year earlier.

A large influence on Australia's Current Account is the high negative balance on the Income Account. Interest payments on foreign debt make up a significant prosortion of the income deficit. Other categories of income payments include profits payable to overseas shareholders of companies trading in Australia, wages to overseas residents and rentals to overseas landowners in Australia. The deficit on the incomes account had been increasing in the 5 years up to 2019, which may have partially reflected the high profitability of Australian miming companies leading to additional dividend payments to overseas shareholders. However. over the past year the incomes defigit has contracted, possibly due to lower interest rates.

| Current Accosat thems 38 | Yesr to March |  | Yesr so Mach |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 2020 |  | 2016 |
|  | 3 | 891 | § | 3\% |
| mpons | 3 | [319) | $\Sigma$ | 13211 |
| Butariod -x' Yimere | 5 | 73 | 5 | 35 |
| Servees Baterce | \$ | (1) | \$ | (5) |
| Batince of Trado in Goosio 8 Services | 5 | 73 | 5 | 33 |
| Nate hicome | 3 | (50) | 5 | 164 |
| Ofriolt focouvt elahinat | 5 | 12 | 5 | 1311 |

Unlike the Ne: Incomes account, the Ealance of Yrade has fluctuated between surplus and deficit ove: time. Exports have increased over recent years due to strong prices and higher volumes from past investment in mining infrastructure. As a result, a surplus on the Balance of Trade has emerged and widened recensly.

Australia has previousiy run large deficits on the Services Account. However, grovith in income from industries such as tourism and education to overseas students, has helped keep the Services Account to a small defeit in recent vears.

## 2. Foreign debt

With the Current Account in a deficit position over the majority of periods, there has been a need to borrow funds to finance the gap between what is earned and spent between Australia and overseas. sustralia has
experfenced significant growth in foreign debe Over the past 3 decades. In June 1980, the net exiernal cebt of Australia was only $\$ 6.9$ billion or 5.8 kh of Gop following a period of high trade deficits, foreign debt levels increased markediy over the 1980 s kefore stabilising in the mid 1990s. Debt then accelerated again over much of the post decade, before stabillsing over the past Ayears due to the lowering of the size of the Current Account defocit.

In March 2020, the value of the net lureizn debt was equivalent to $5 \%$ 0\% of annual GOP. This ecpresents a moll-back from the cyelical high of 62.92 reached in June 2016.


However, not all the finatice comine into sustrala is in the form of borrowing. Finance can also be in the fom of expuly investments (which tend so be purchases of Australian property or sharces by overse.s antitins) Unlike borrowings. equity investments do not add to dedt. Curently, all of Australian's enet forcigin liabitition are in the form of dethe rather than equity. Australia curecoty has more equity investments overseas [e. overseas sharehoidings owned by Austrabans) than it has equity liabilities (e.t. shares of Australian companses owned by foreigners). This is shown on the tabie below as a net nepative foreibn liability equivalent ia $\$ 338$ biltion. This is a significont change on the historical position. In the mid 1990s. net equity liabilities represented atound 305 of total net foreign liabilitios.

| Forengn Liabilities | \$ tullion in March 2020 | * of <br> Total |
| :---: | :---: | :---: |
| Set Formsn Debl | \$1.146 | 141250 |
| Wo: Forrgn Equity Owing | \$ 338 | -42\% |
| Total Mey foreigen tiabilitem | 5808 | 100\% |

## External stabillty outlook

Sirce the 1990 s, Australra's external stabilipy has not been a matter of significant concern. In contrast zo many other developed nations, the economy has experienced consistent growth. Government debt has been relatively low and the currency relatively strong. However, discussed below are lactors that could cause future disruption to externail stability.

## (i) The uictous trade deficit - debi circte

Even if Australia experiences ongoing surplus in its Balance of Tade, the high foreign debt means any further significant improvertent in the Current Account deficit will be difficult. This is because the high debt creates ine erest servicing costs which drive the net income ousflow on the Current decourt. A *veious circle can therefore twe created whereby high debt leads to higher interest payments. which leads 10 a hipher Curent Account deficit, requirine more debe. A rlse in interest rates, or a fallint the vatue of the SA, could exacerbate this vicious circle.

## (II) A correction in the serms of crode

Over recent years Ausiralia's Terns of Trade has beon at reletively hight levels Norse the less, the Austratian economy is vulieratile to downeard shifts in the Terms of Trade, with commodity prices mistorically gulte wolas lie.

## (iii) Weat non•mineral exports

A yetmive decline in norl mininy, pelased exparts has made Australia's external positwon mope vulnerable to a downturn in the mining sector. Ower the 20 Yeals io March 2020 , resources have increased their share of total export income from A9\% to $56 \%$. Although there hals also been impressive growth from tourism and educalion exports, these are curpenty constrained by the Covio retated travel constraints.

## (iv) High dependence on Chino

China currently accounts for over $30 \%$ of Australia's exports. This is a sharp increase from tess than 5 但 in the year 2000. With such high dependence on one nation, Australia is potentially vilnerable to change in the economic fortuncs of China of a deterioration in the broader political and economic relationship between the two nations.

And this is GOLD!!
An RBA speech from last year...Maybe a bit too much detail, esp on Debt, but the rest is GREAT. Much better than I could ever write!!!
Read it below or https://www.rba.gov.au/speeches/2019/sp-dg-2019-08-27.html

RESERVE BANK OF AUSTRALIA

## Speech

## A Balance of Payments

## Guy Debelle ${ }^{[\text {* }]}$

Deputy Governor

## Address to the Economic Society of Australia <br> Canberra - 27 August 2019



When I started my working life here in Canberra at the Treasury just over 30 years ago, one of the most prominent macroeconomic issues was the current account deficit. Heated discussions took place about twin deficits, banana republics, consenting adults and whether or not the current account should be an objective for monetary policy. ${ }^{[1]}$ Early on in my Treasury career, in between my radio shows on 2 XX , I worked in the Balance of Payments section. There was a whole unit devoted to analysing and forecasting the current account deficit, given its prominence in the economic and political debate.
Today, three decades on and back in Cánberra, I am going to again focus on the current account balance and Australia's external position. But the rationale for doing so today is quite different to that in the 1980s. Today, the current account deficit is the smallest it has been as a share of the economy since the 1970s and the trade surplus is about the largest it has been since the 1950s. The payments are the closest to being in balance in decades!
As a result, Australia's net foreign liabilities, that is, how much we owe foreigners less how much foreigners owe us, have been declining for the past decade to be at their lowest as a share of GDP since the early 2000s. ${ }^{[2]}$ And the composition of those liabilities has changed quite significantly. It is markedly different from that in the 1980s. In the 80s, foreign liabilities were often regarded as a significant vulnerability for the Australian economy. I think this risk was overstated. The liabilities were predominantly in Australian dollars, which meant the exchange rate still could work very effectively as a shock absorber. I will expiain why later.
It is worth examining how and why Australia's external position has changed over recent decades. The nature and extent of the change is generally underappreciated, and is worth highlighting as the trade surplus and the current account deficit reach multi-decade milestones.

## The Current Account

I will start with the current account deficit.
For pretty much all of its modern history, Australia has been a net importer of capital. Because there are a lot of profitable investment opportunities in Australia relative to the size of the Australian savings pooi, we have sourced capital from the rest of the world either in the form of debt or equity. This is not because savings in Australia is particularly low; it is about on par with many other advanced economies. Rather, it is because the share of investment in the Australian economy is higher than that in many other advanced economies, and foreigners were attracted by the investment returns on offer.
The counterpart to Australia being a net importer of capital is that the country runs a current account deficit (CAD). Through the 1980s, 1990s and 2000s, the CAD averaged around 4 per cent of GDP But since 2015, the CAD has narrowed to be currently around 1 per cent of GDP. In the March quarter this year, the deficit was 0.6 per cent of GDP, and it may well be smaller still in the June quarter just past. This is the narrowest the current account has been since the December quarter 1979.

The current account is comprised of two components: the trade balance and the net income balance Graph 1). The narrowing of the CAD reflects a substantial shift in Australia's trade balance. For three decades, the trade balance was generally in deficit, averaging around $11 / 4$ per cent of GDP from 1980 until 2015. Since then, the trade balance has shifted into surplus. In the March quarter, the surplus amounted to 3 per cent of GDP, the largest surplus since 1973.

Graph 1
Current Account Balance
Per cent of nominal GDP


The large surplus reflects a number of dynamics. Two of the primary drivers come from the resources sector. The first is the high revenue from resource exports, both because of the large increase in the volume of resource exports (i.e. how many tonnes Australia exports) as well as the high prices we have recently been receiving for those exports, in particular iron ore. The second is that as the resource investment boom has reached its end, the import of investment goods to boost the capacity in the resources sector (in particularly the LNG sector) has declined considerably. The extra revenue has bolstered national saving and resource investment has declined considerably over the past five years. This is a major reason why the gap between investment and saving has declined to its lowest in a long time, which, if you remember your national accounting identities, is directly equivalent to the current account being at multi-decade lows.
But the trade balance story is not just a resources story. There has been strong growth in exports of education and tourism. The share of services in Australia's exports has increased from 17 per cent in the 1980 s to 21 per cent now. The other noteworthy development of late has been the strong growth in manufactured exports. These include pharmaceutical goods and medical devices, and have grown by 15 per cent over the past two years.
The other part of the current account is the net income balance. The net income balance is the difference between how much it costs to service the country's foreign liabilities (for example, interest payments on foreign debt) and the earnings on Australia's foreign assets (for example, dividend payments to residents from foreign share holdings). The income balance has widened a little in

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recent years, but is around the middle of the range it has been in since the late 1980s at 3.4 per cent of GDP. I will come back to this later.

## Net Foreign Liabilities

Each quarter that Australia funds its current account deficit with net borrowing from the rest of the world, we gradually add to the stock of net foreign liabilities (NFL) we owe to the rest of the world. As Australia ran current account deficits through the $1970 \mathrm{~s}, 80 \mathrm{~s}, 90 \mathrm{~s}$ and 2000s, that stock of NFL grew, peaking at 60 per cent of GDP in 2009.
But since then, reflecting the lower levels of the CAD and correspondingly lower net capital inflows, the stock of Australia's NFL (as a share of GDP) has declined over the past decade to be 50 per cent of GDP currently (Graph 2). The decline in NFL as a share of GDP masks some significant changes in the composition of both the gross foreign liabilities and gross foreign assets.

Graph 2


It is important to stress the need to look at the gross flows and stocks, not just the net numbers There are large capital inflows and outflows all the time, even when the net capital flow (or the current account deficit) is low. As a result, the gross stocks can change quite significantly even with low net flows.

## Debt

## Graph 4

 around 20 per cent by 2015 and has been relatively stable since then. Correspondingly the public sector's share of gross debt liabilities increased from around 10 per cent in the late 2000 s to around 20 per cent in 2012, where it has remained since (Graph 5). At the same time, the share of private financial debt (mainly banks) has fallen since the crisis.What has been the driver of the increase in foreigners' holdings of Australian long-term debt over the past decade or so? The main explanation has been the large accumulation of Australian public sector debt by foreigners, including by central banks and other public sector asset managers. Central banks increased their allocation to Australia in their foreign reserves portfolios in the aftermath of the global financial crisis. Foreign ownership of Australian Government bonds increased from around 40 per cent in the early 2000s, peaking at nearly 80 per cent in 2012 (Graph 4). ${ }^{[3]}$ At the same time, the size of the Australian Government bond market grew significantly.

On the liability side, there has been a large shift from short-term debt to long-term debt. In net erms, long-term debt liabilities are currently 52 per cent of GDP. They are slightly larger than Australia's total net foreign liabilities. They have risen from around 25 per cent of GDP in the early 2000 s. Over the same period, the share of short-term debt has declined from 20 per cent to be just under 5 per cent of GDP now.

As Graph 3 shows, the movement in the net position masks, as it often does, different dynamics in the gross positions. The decline in net short-term debt is mostly due to the growth in short-term debt assets that we hold. But short-term debt liabilities have also declined from their peak.

## Graph 3

Gross Foreign Debt Positions


Sources: ABS; R6A

## Non-resident Ownership of Australian Debt

Share of outstandings


* Excluding self-securitised asset-backed securities
** Dashed line includes government securities held under repurchase agreements by domestic banks and registered financial corporations Sources: ABS: RBA

As a result, foreign holdings of public sector ${ }^{[4]}$ debt increased from 7.5 per cent of GDP in 2009 to

## Graph 5

Gross Foreign Debt Liabilities


In 2007, the banking sector accounted for the bulk of Australia's net foreign liabilities. Their annual borrowing amounted to around about the same size as the current account deficit. This led to the misplaced claim that the banks funded the current account deficit, which ignored the other large capital outflows and inflows that were occurring. ${ }^{[5]}$ The banking sector's net flows and stocks were the same order of magnitude as the aggregate net flows and stocks. But this wasn't causal. There were large capital flows occurring in both directions in other parts of the economy at the same time. And on the stocks side, there were other large stocks of debt and equity, both assets and liabilities, which all also contributed to the aggregate net foreign liability position in addition to those of the banking system.

## Equity

At least as dramatic has been the shift in the net equity position. For most of its modern history, foreigners owned more equity in Australian companies than Australians owned in foreign companies. But since 2013, that has not been true. Since 2013, Australians have owned more foreign equity than foreigners have owned Australian equity (Graph 6). This largely reflects the significant allocation to foreign equity by the Australian superannuation industry together with the fact that the superannuation sector is relatively large as a share of the Australian economy.
Currently, Australian equity investment abroad exceeds foreign equity investment in Australia by $7 \%$ of GDP. That is, the country has a net foreign equity asset position. This compares to an average net equity liability position of 10 per cent of GDP between 1990 and 2010.

## Graph 6

Gross Foreign Equity Positions


The shift to a net foreign equity asset position reflects:

- the ongoing accumulation of foreign equities by Australia's large superannuation sector (these flows have partially, but not completely, offset continued equity inflows to Australia from foreign investors)
- asset valuation effects, as foreign equities have outperformed Australian equities over the past several years
- the depreciation of the Australian dollar over this period. Because foreign equity assets are denominated in foreign currency, the value of foreign equity assets in Australian dollar terms increases when the Australian dollar depreciates. But the value of equity liabilities, which are obviously denominated in Australian dollars, does not change. So, when the Australian dollar depreciates, the net equity position increases.

This is a major shift in Australia's external position.

## Net Income Deficit

Despite the reduction in Australia's stock of net foreign liabilities over the past couple of years, the net income deficit has widened a little, because the average yield that Australia pays on its net foreign liabilities has increased by more than the yield it receives on net foreign assets.

## Graph 7



Graph 7 shows the breakdown in the yields we pay and earn between debt and equity and between liabilities and assets.
The graph shows that the main development has been a sharp increase in the payments on foreign equity liabilities. Much of that increase has been due to significantly higher payments recently to foreign owners of direct equity in Australia's mining sector because of the increased profitability of the mining sector. The foreign ownership of the large mining companies is around three-quarters.
Earlier I highlighted how the trade surplus had risen to historicaily high levels because of higher resource exports. These higher payments to the foreign shareholders limit the narrowing of the current account that occurs from the boost to the trade surplus from this source.
These payments result in 'notional' capital outflows because most of the mining companies' profits are earned in US dollars and the distribution of those earnings to foreign owners are also predominantly in US dollars. So these amounts never come onshore into Australia, or are converted into Australian dollars, even though the balance of payments records them as capital flows.

While net equity payments have increased, the servicing cost on the debt liabilities has been little changed in recent years, despite the maturity extension of Australia's net debt liabilities. This is because government debt has lower servicing costs than bank debt and it now comprises a much larger share of the stock of liabilities. Indeed, the cost of servicing overall debt has declined to be its

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lowest on record. With Australian Government bond yieids now materially below those on US yields, the debt component of the net income deficit may decline further still.

## Vulnerability?

Foreign debt liabilities are often regarded as a vulnerability. Should we be concerned about this?
In my view, we shouldn't be. Firstly, the vast bulk of Australia's foreign debt is denominated in Australian dollars, not foreign currency. A/l of the public sector debt is issued in Australian dollars. The debt that is denominated in foreign currency, which is issued by the banks and corporates, is hedged back into Australian dollars (and generally the hedge is maturity-matched). Where it is not, there is often a natural hedge available in the form of foreign currency income.
As a result, the vast butk of Australia's foreign debt liabilities are in Australian dollars, especially once you take into account the hedging. Moreover, all of the equity liabilities are in Australian dollars too. To put some numbers on this, 68 per cent of foreign liabilities are denominated in Australian dollars, this increases to 85 per cent after hedging.

Historically, a high level of foreign liabilities has been seén as a cause for concern. A number of countries have got into serious trouble because of high foreign liabilities, particularly debt. But in almost every case, the root cause has been the currency exposure. The countries that have got into trouble have had high level of foreign debt denominated in foreign currency. The latter has been the crucial source of vuinerability. It means that the exchange rate can no longer play the important role of shock absorber. If a country with a high level of debt in foreign currency experiences a depreciation, the debt rises in domestic currency terms. The country's ability to service and repay the debt worsens. This can lead to sudden stops, that is, an immediate cessation of capital flows, as investors try to withdraw. These are the archetypal currency crises of Latin America and the Asian crisis. ${ }^{[6]}$
This isn't an issue for Australia because of the currency composition. The exchange rate depreciation can play the important role of shock absorber, as the experience in the Asian crisis and again in 2008 and 2009 demonstrated. But it took some time to convince external observers of this. To demonstrate that the currency composition of the foreign liabilities wasn't a vulnerability, the RBA commissioned a survey from the ABS to measure this. The first of these surveys was in 2001, and we have continued to get the ABS to repeat the survey every three years. These have shown a consistent picture of minimal foreign currency exposure, including in the most recent survey in 2017. ${ }^{[7]}$

A large share of Australia's foreign assets are denominated in foreign currency (86 per cent, which declines to 63 per cent, taking account of Australian investors hedging their foreign currency assets). So, if you look at the balance sheet of the country as a whole, Australia has a net foreign currency asset position. This is true on an unhedged and hedged basis (Graph 8). Hence when the exchange rate depreciates, the value of net foreign liabiities actually declines rather than increase. ${ }^{[8]}$

## Graph 8

External Position* Composition after hedging, quarterly


* Hedge ratios inferred from ABS Foreign Currency Exposure surveys

Sources: ABS: RBA

To reiterate, this allows the exchange rate to play the important role of shock absorber to external shocks. The exchange rate's ability to do so is not compromised by Australia's net foreign liability position. The fact that the liabilities are effectively denominated in Australian dollars while the assets are in foreign currency does not impede the exchange rate adjustment. If anything, it actually helps the adjustment. This wouldn't be true if the debt were denominated in foreign currency.

## Conclusion

To conclude, Australia's balance of payments and external accounts have undergone a significant transformation since the days of Paul Keating's banana republic comment. The transformation has been quite dramatic and often overlooked. I have highlighted some of the most noteworthy developments. The trade surplus is around its largest, and the current account its narrowest, as a share of GDP in many decades.
On the capital account, the mirror image of the current account, there has been a significant change in both the composition of the capital flows and, as a result, the stock of foreign liabilities and assets. Government debt now comprises a much larger share of debt liabilities and bank debt a smailer share. The maturity profile of that debt is much longer. On the asset side, the large increase in Australian offshore equity investment, mostly through the superannuation sector, means the country as a whole has a net asset position in equities. The structure of Australia's external accounts now resembles that of the United States. While Australia doesn't have the exorbitant privilege of the US,

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the external accounts do not constitute a source of vulnerability and have become increasingly resilient over the past 30 years.
All of these developments have taken place under the rules-based global trading system that has been in place for a number of decades now. Despite some flaws, that system has delivered sizeable benefits for global growth and welfare. Australia has clearly been a major beneficiary of that system. The current threats to the system are a significant risk to both Australia and the world.

## Endnotes

[*] Thanks to Dana Lawson, Emma Smith, Isabel Hartstein and Jarkko Jaaskela for their assistance.
1] John Pitchford was one of the main contributors to the debate at the time. See Pitchford J (1989), 'A Sceptical View of Australia's Current Account and Debt Problem', Australian Economic Review, 86, pp 5-14.
[2] The current account isn't the only determinant of whether net foreign liabilities rise or fall as a share of GDP. That also depends on the growth of nominal GDP and the servicing cost on those liabilities.
3] The foreign ownership share has declined in recent years. Foreigners have continued to buy public debt, just not in the foreign ownership share as it has been issued. This share is adjusted for holdings under repo. This adjustment currently the same she ownership share by around 4 percentage points. I think it is better to add back the holdings under repo s it gives a better sense of actual foreign ownership. See Becker C and P Rickards (2017), 'Secured Money Market Transactions: Trends in the Australian Repo Rate', Paper presented at the 22nd Melbourne Money and Finance Conference 'Evolutionary Trends in the Australian Financial Sector', Hosted by the Australian Centre for Financial Studies, Melbourne, 10-11 July,
[4] This includes the Commonwealth and state governments, central borrowing authorities and public non-financia corporations, but excludes the RBA.
[5] Debelle G (2014), 'Capital Flows and the Australian Dollar', Address to the Financial Services Institute of Australia, Adelaide, 20 May.
[6] See R Dornbusch, I Goldfajn and R Valdés (1995), 'Currency Crises and Collapses', Brookings Papers on Economic Activity.
[7] See L Berger Thompson and B Chapman (2017), 'Foreign Currency Exposure and Hedging in Australia', RBA Bulletin, December, pp 67-75.
[8] Gourinchas, P-O, and H Rey. 'International Financial Adjustment'. Journal of Political Economy, 115:4, pp 665-703, August 2007. Gourinchas, P-O, and H Rey. 'From World Banker to World Venture Capitalist: US External Adjustment and the Exorbitant Privilege', NBER Working Paper 11563.

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Pest Austritia acknowtedges the Aboriginal and Torres Strat Istander Peoples of Australia as the Tractional Custadians of this and aud reconnises their continuing connection to Country. We pay our respects to their Elders, past, present and emerging.

