# Teaching about Economic Growth using RBA Resources

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Member, RBA Educators Advisory Panel

### Senior Economics syllabus coverage of Economic Growth

Economic growth is a key theme in all of the senior economics syllabi Coverage varies but includes:

- Measurement of economic growth (incl. criticisms of GDP/ GDP per capita)
- Factors influencing economic growth
- Why economic growth is important and how it affects living standards
- Circular flow of income and how levels of injections and leakages affect economic activity and economic growth
- Policies used to influence the level of economic growth
- ► Trade offs (incl. environmental sustainability vs economic growth)

#### ALL require skills like:

- Selecting, analysing and evaluating data and issues
- Evaluating or predicting economic outcomes

## Years 7-10 Australian Curriculum

HASS content relating to economic growth most relevant in Level 10 (Year 10) including:

- Indicators of economic performance and how Australia's economy is performing (ACHEK050)
- The links between economic performance and living standards, and how and why variations exist within and between economies (ACHEK051)
- The ways that governments manage economic performance to improve living standards (ACHEK052)

**Skills** developed at this level that can be supported through RBA resources/activities include:

- Develop questions and hypotheses about an economic or business issue or event, and plan and conduct an investigation & (ACHES055)
- Gather relevant and reliable data and information from a range of digital, online and print sources (ACHES056)
- Analyse data and information in different formats to explain cause-and-effect relationships, make predictions and illustrate alternative perspectives (ACHES057)
- Apply economics and business skills and concepts in familiar, new and hypothetical situations (ACHES059)

# RBA Education page - Resources!





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# In Education

# Resources Teacher Materials Book a Talk Special Events for Students Professional Development Econ-essentials Explore Economics About the Program Contact Us Subscribe

#### Education

The Reserve Bank recognises the importance of education and is committed to supporting people who want to learn more about the Bank's activities and the Australian economy. Our public education program provides a range of information, resources and learning experiences. These resources have been designed to support students and educators, as well as being relevant for more general audiences.



hoto: Reserve Bank of Australia



Photo: Reserve Bank of Australia



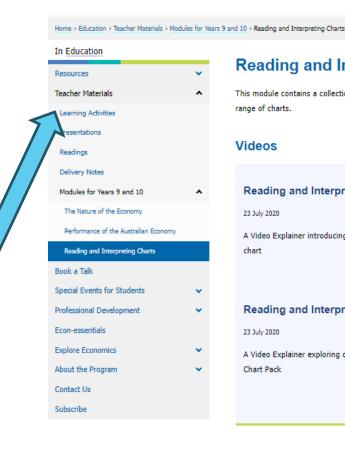


# Reading and interpreting charts

#### **Excellent resources:**

- Video on how to read and interpret charts
- Accompanying 'Illustrator' e.g. for classroom wall

Worksheet: Students apply the skill to a series of charts. (Worksheet is in 'Learning Activities')



#### Reading and Interpreting Charts

This module contains a collection of resources for teachers to help students develop their ability to read and interpret a range of charts.

#### Videos

#### Reading and Interpreting Charts - Introduction

23 July 2020

A Video Explainer introducing students to the main components of a

#### Reading and Interpreting Charts - Examples

23 July 2020

A Video Explainer exploring charts from the monthly Reserve Bank Chart Pack





#### Illustrators

#### Reading and Interpreting Charts

Summary of the different components of a graph.

Download PDF 236KB





Videos 🕖

Illustrators 0

Learning Activities 0

## Key Economic Indicators Snapshot

- Updated regularly
- Poster display in classroom? Watch the economy 'unfold' over the year!

#### **Activity:**

Allocate responsibility to a different pair or group of 3 students to 'unpack' each new snapshot.

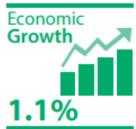
#### They need to:

- Explain why the indicator is important (focus on most important of course!)
- Compare current performance with previous performances (earlier snapshots)
- Provide a brief evaluation of overall economic performance





















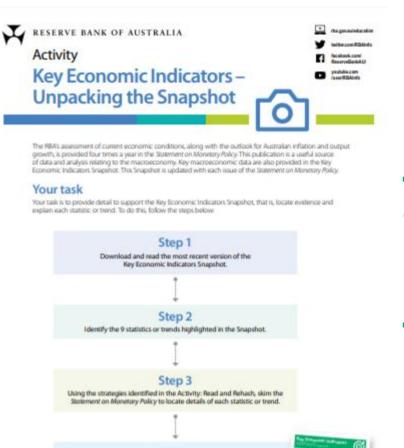




# Snapshot

### **Another Activity:**

- Use the **Activity** on the **RBA Learning Activities** page
- 'Unpack' the snapshot and make links to the quarterly Statement on Monetary Policy for extra background
- E.g. Is the 1.1% Eco Growth in latest Snapshot annual or quarterly? What does it say about eco growth & the economy's 'performance'?



Step 4

that the Snapshot is double-sided - the front page contains the high-level statistic or trend, and the back page contains your

explanation of the statistic or trend.

Summarise the details of each statistic or trend, providing evidence where possible. Your summary should fit on the back of the relevant box on the Key Economic Indicators Snapshot. In other words, imagine Key Economic Indicators - Unpacking the Snapshot | Activity

**Explanation of Key Economic Indicators Snapshot** 

**Key Economic Indicators SNAPSHOT** 



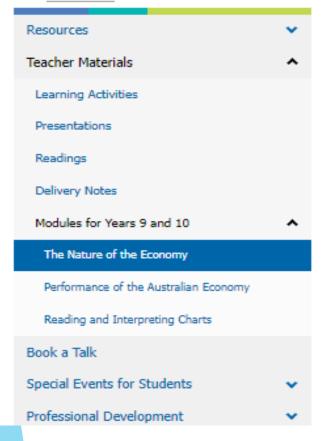




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Home > Education > Teacher Materials > Modules for Years 9 and 10 > The Nature of Economy

#### In Education



#### The Nature of the Economy

This module contains a collection of resources for teachers to introduce students to the Australian economy and its participants, the circular flow model, and the business cycle. The resources support a number of Economics and Commerce curriculum objectives.

#### **Delivery Notes**

#### The Nature of the Economy

Guidance notes for teachers containing background information, and a summary of available resources and how they could be used within a classroom setting to deliver this topic.

Download PDF 186KB



# Materials on circular flow model of the economy

Useful for senior classes (although designed for middle school)

#### The Circular Flow Model

Diagram showing and describing the five-sector circular flow model of the economy



#### The Business Cycle

Diagram showing the business cycle and features of economic expansion and contraction









#### Complete the Circular Flow Model

Provides an outline of the circular flow model for students to label

Download PDF 101KB

#### Injections and Leakages

Helps students identify different economic activity as injections or leakages

Download PDF 144KB

Worksheets

#### **Business Cycle Case Studies**

Help students consider how different people might be affected by the business cycle

Download PDF 107KB







# RBA Explainer: Economic Growth





#### **Economic Growth**

#### What is Economic Growth?

Economic growth refers to an increase in the size of a country's economy over a period of time. The size of an economy is typically measured by the total production of goods and services in the economy. which is called gross domestic product (GDP).

Economic growth can be measured in 'nominal' or 'real' terms. Nominal economic growth refers to the increase in the dollar value of production over time. This includes changes in both the volume of production and the prices of goods and services produced. Economists normally talk about real economic growth - that is, increases in the volume produced only, which takes away the effect of prices changing. This is because it better reflects how much a country is producing at a given time, compared with other points in time.

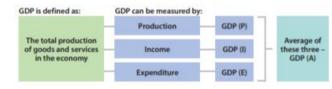
#### How is GDP Measured?

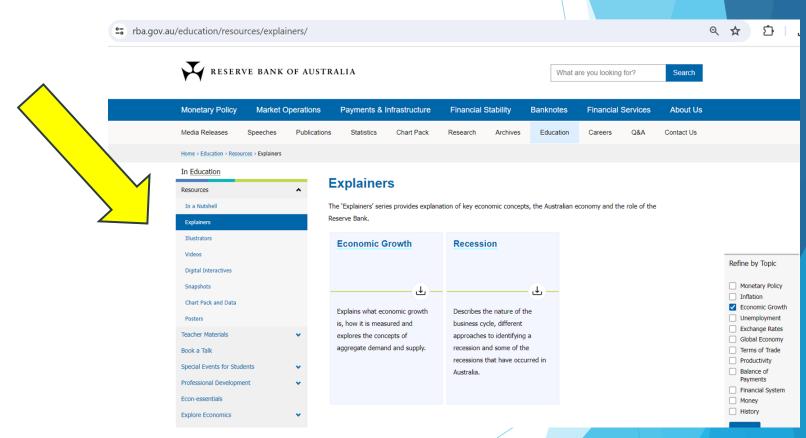
To measure GDP each guarter, the Australian Bureau of Statistics (ABS) collects data from households, companies and government agencies. The ABS then calculates GDP in three different ways, looking separately at information about production (P), income (I) and expenditure (E). The three definitions

- · GDP(P): total value added from goods and services produced
- · GDP(I): total income generated by employees. and businesses (plus taxes less subsidies)
- · GDP(E): total value of expenditure by consumers, businesses and governments on final goods and services.

These are three different ways to estimate the same thing. In practice, different results can be obtained because there are never enough data to build a complete picture of the economy. Many economic activities have to be estimated and measurement errors arise. In Australia, the ABS and economists generally focus on the average of the three measures - GDP(A).

#### How is GDP Measured?





# Using the explainer in class

Idea 1 Limitations of GDP as a measure of wellbeing - using the explainer as a starting point.

#### **WORKSHEET:**

- Table activities that would / wouldn't count in GDP
- Investigate current 'GDP per capita recession' in Australia
- Consider income distribution vs GDP/capita

Students write a **reflection** outlining the limitations vs the value of GDP as a measure of wellbeing.

Worksheet provided

# What's not Captured in GDP Statistics?

While GDP is the main measure of economic growth, it doesn't capture everything that adds value to the economy. One example is that caring for children is not included in GDP if carried out by their parents (but is if it is done by a paid childcare worker).

GDP doesn't capture broader aspects of economic welfare of the nation's population. For example, if GDP rose by 2 per cent one year, but the population grew by 4 per cent, then average GDP per person would have decreased. Similarly, GDP doesn't tell us anything about how evenly national income is split across the population. Income may have increased for everyone, or may have been concentrated in certain groups.

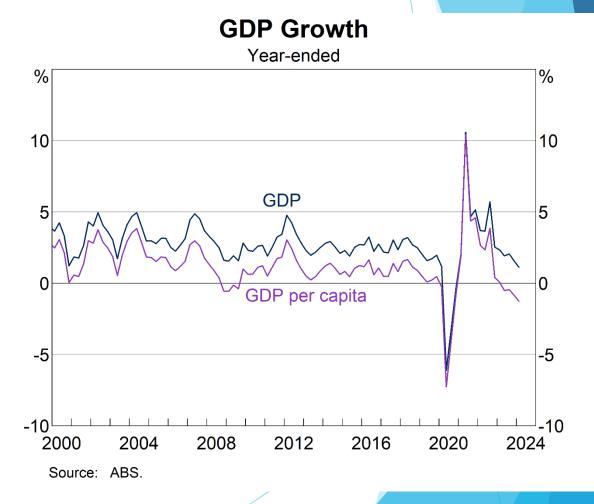
Finally, there are things that raise GDP but don't make the country better off. One example is the initial spending to replace buildings and infrastructure after a natural disaster, which boosts measures of economic growth.

# IDEA 2: GDP vs GDP per capita

#### **WORKSHEET**

- Examining the performance of the economy in terms of GDP growth vs GDP per capita growth
- Developing skills in interpreting data and making judgements about what it shows.

Worksheet provided



# IDEA 3: AD and AS factors - visual analysis

- Use after reading about AD and AS and factors affecting both ...
- Key skill in senior Economics: ability to analyse and evaluate data (including charts)

#### The Task:

Provide students with a sheet of the charts from the latest Chart Pack (See sample provided)

Collection of AD and AS factors

Ask them to identify:

- 1. AD factor or AS factor?
- ▶ If AD factor which component(s) of AD will be (most) affected?
- 2. Favourable or unfavourable effect?

Extension: Each pair of students presents to the class and 'tells a story' about what a particular chart shows and likely implications for economic growth

Worksheet provided

# Sample: ... 'Tell me a story'

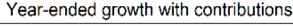
- Unpack chart: Household consumption growth
- Tell me a story about this chart
- Identify AD component
- Consider breakdown between discretionary and essential
- Students consider why and how much that will affect the economy. Effect on multiplier? Effect on economic growth?

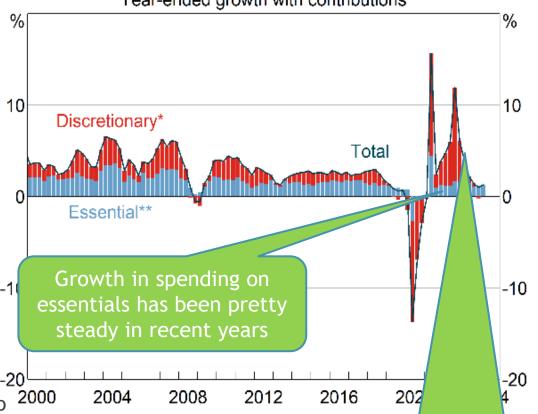
#### WHY DO THIS?

- Practising skills of analysing relationships between various indicators and economic outcomes
- Encourages development of questioning skills.
  - When confronted with a graph what questions do they need to ask to understand/ make sense of it?
  - Can they find out the answers to these questions?
  - Can they explain them to others?

#### C component of AD (Private Consumption)

#### Household Consumption





- Includes furnishing & household equipment, clothing & foo recreation & culture, mot water transport, hotels, d services'
- Calculated as a residual health, education and ut

Sources: ABS; RBA.

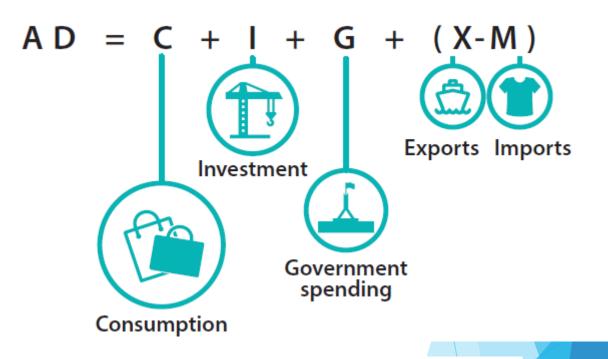
Downturn in consumption spending growth since end-2022 due to falling discretionary spend

### Using the Economic Growth Explainer in your classroom

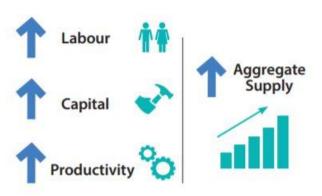
- ▶ IDEA 4: Set as a 'flipped classroom' reading task
- Students read the information outside the classroom
- In class, students create up to 10 questions they can set for other students in the class (teacher can provide an idea of the kinds of questions required e.g. 2 relating to AD, 1 relating to AS, 1 relating to real vs nominal, 1 on the multiplier, 1 on role of MP operating counter-cyclically etc.)
- Discuss the student-created questions in class, to help students <u>modify</u> or <u>improve</u> them
- Use the student-created questions for either <u>classwork or revision</u>
- Extension idea: students required to create 'sample answers' to share with the class
- (Some teachers ask students to generate questions and then promise students that a certain number of student-generated questions will be on the assessment!)

### Using the Economic Growth Explainer in your classroom

- ► IDEA 5: Students representing information visually
- Provide students with a set of scenarios and a set of labels. (AD, AD components, AS)
- Classify the scenarios according to AD/AS & component of AD likely to be affected (and direction of effect)
- There may be some debate over classificationencourage this!
- **EXTENSION:**
- Students write extended answers unpacking steps in how changes to AD factors influence economic growth



Worksheet provided

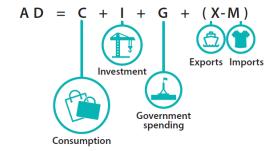


## More GDP Growth ideas...

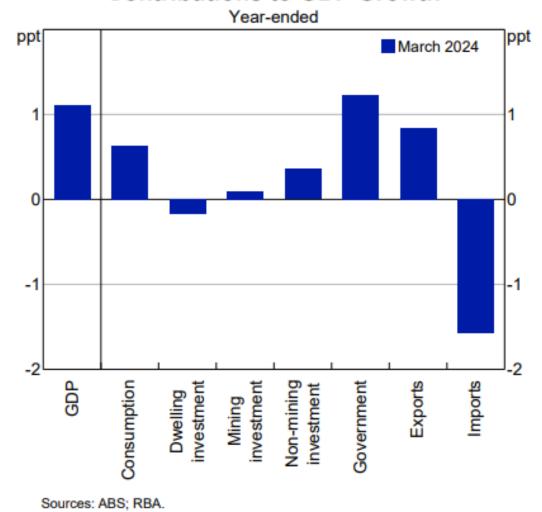
Annotate this diagram with the images from AD formula

Students analyse the <u>relative size</u> of the contribution of each component to AD/GDP growth.

What does this chart tell us about Australia's economy over the last 12 months?



#### Contributions to GDP Growth



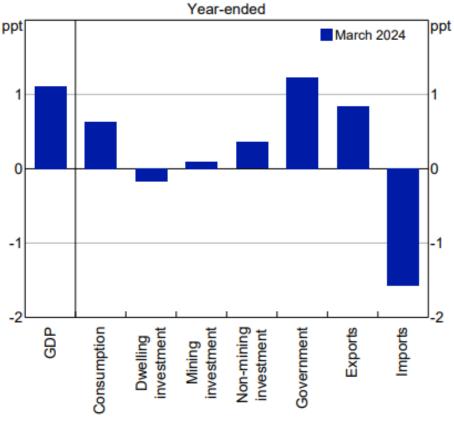
# Compare the two charts

#### **GDP Growth**

Contribution to average annual growth; 2012/13 to 2022/23 ppt ppt Government Government

Similarities?
Differences?
What does it tell us about our economy at the moment?

#### Contributions to GDP Growth

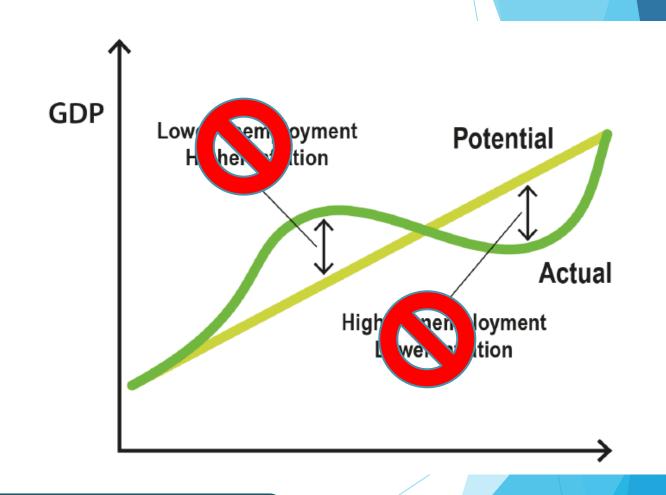


Sources: ABS; RBA.

Sources: ABS; RBA.

## Worksheet: Actual vs Potential GDP

- Students examine the diagram (economic indicator labels have been removed)
- Students predict likely levels of unemployment and inflation
- Justify prediction
- Consider how RBA would adjust MP setting in response



Worksheet provided

# RBA Explainer: COVID-19 Pandemic



Book a Talk Special Events for Students

Econ-essentials

Explore Economic

About the Program

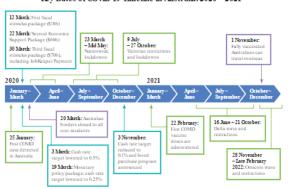
Professional Development

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#### Key Dates of COVID-19 Timeline in Australia: 2020 - 2021\*

This Explainer summarises the main economic effects of the COVID-19 pandemic in Australia and how the economy subsequently recovered. It also describes how notice makers responded to it in Australia. It covers the period from 2020



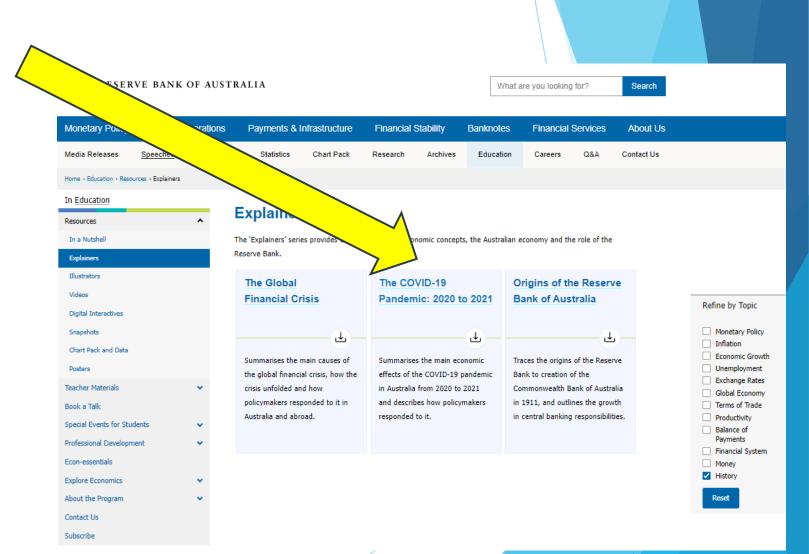
<sup>\*</sup>This is a simplified timeline that only covers selected events and policy responses

#### What were the economic effects of the pandemic?

#### Initial COVID-19 wave in Australia

Australia recorded its first COVID-19 case in late January 2020. As the number of COVID-19 cases in Australia increased, the Government implemented public health measures to contain the spread of the virus. This included:

- · restrictions on domestic and international travel
- · the suspension or closure of non-essential businesses and activities (such as indoor sporting facilities, entertainment

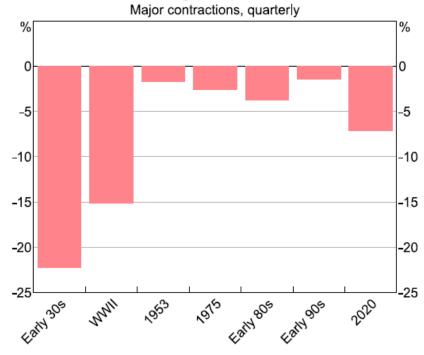


# **COVID-19 Pandemic Explainer**

- Students find economic history engaging
- Still looms large in their lives
- Graph shows the enormity of the impact on the economy (GDP)
- Prime example of link between material and nonmaterial LS - job losses, GDP contraction, lockdowns and the social and emotional impact.

The result was a large and near-simultaneous economic contraction around the world. Australia's Gross Domestic Product (GDP) fell by a substantial 7 per cent in the June quarter of 2020. This was the largest contraction of the Australian economy since the end of the Second World War.

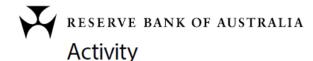




 Declines before 1960 are based on RBA estimates of quarterly data for these periods,

Sources: ABS; Butlin, Dixon and Lloyd (2014); RBA,

# IDEA: Mock RBA Board Meeting



You Make the Decision – the Cash Rate



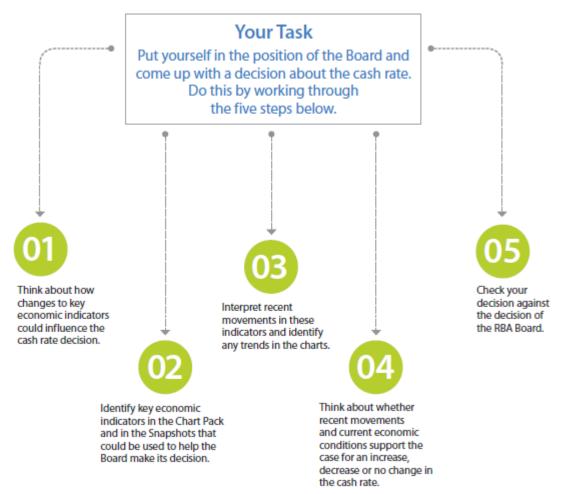
ReserveBankAU/
youtube.com



#### The RBA

The RBA Board meets eight times a year to make a decision about whether to increase, decrease or keep the cash rate the same. For each meeting the Board is given a detailed account of developments in economic and financial conditions. The Chart Pack and Snapshots, along with the table on the next page, provide examples of some of the information that might be considered by the Board when making a decision about the cash rate.

# Resource on RBA Education page (Learning Activities)

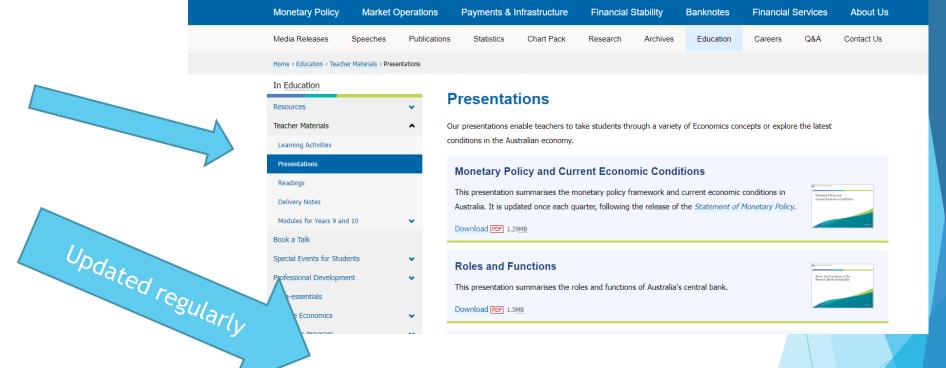






What are you looking for? Search

Source of recent charts for Mock RBA **'Board** meeting' or visit **Chart Pack** 



#### **Monetary Policy and Current Economic Conditions**

This presentation summarises the monetary policy framework and current economic conditions in Australia. It is updated once each quarter, following the release of the *Statement of Monetary Policy*.



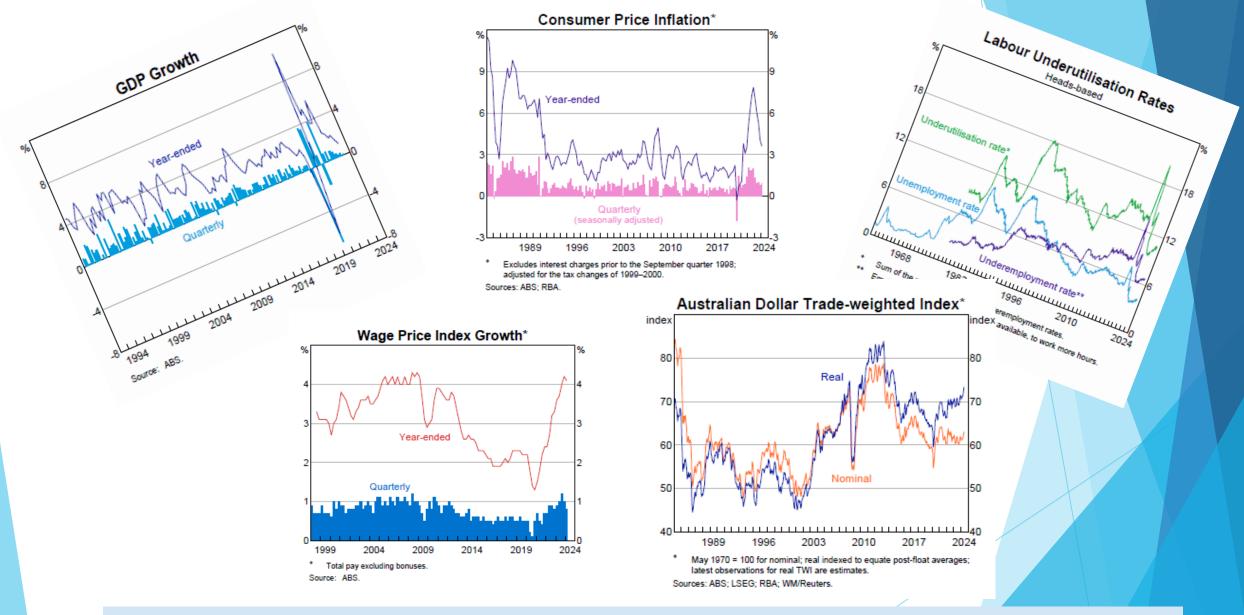
Download PDF 1.29MB

# Gather evidence

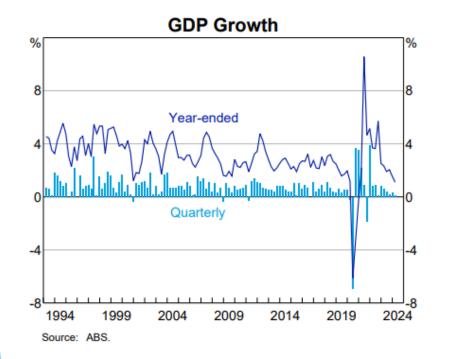
- Students gather latest data on key indicators
- Present information on their indicator(s) to class
- Explain what the indicator says about the economy
- Recommendation re: cash rate decision based on indicator performance
- Class discussion as 'The Board'
- Vote on decision as required

#### Key economic indicators relevant to the cash rate decision

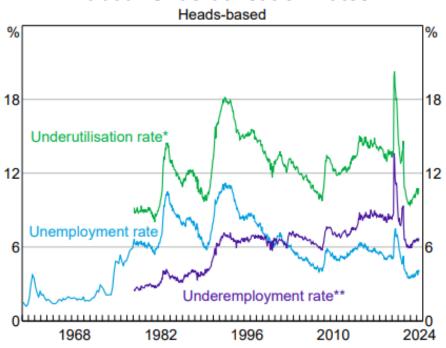
Economic Indicator	01	What is the effect of an increase in the indicator on the cash rate decision	01	What is the effect of a decrease in the indicator on the cash rate decision	02	Identify charts that show changes in the indicator	03	Identify recent changes/trends in the indicator
Economic growth								
Inflation								
Unemployment rate								
Wage growth								
Household consumption								
Household debt								
Business investment								
Terms of trade								
Exchange rate								
Global economic conditions								



What's the trend? Implications for AD and economic growth (& inflation)? Likely MP response?



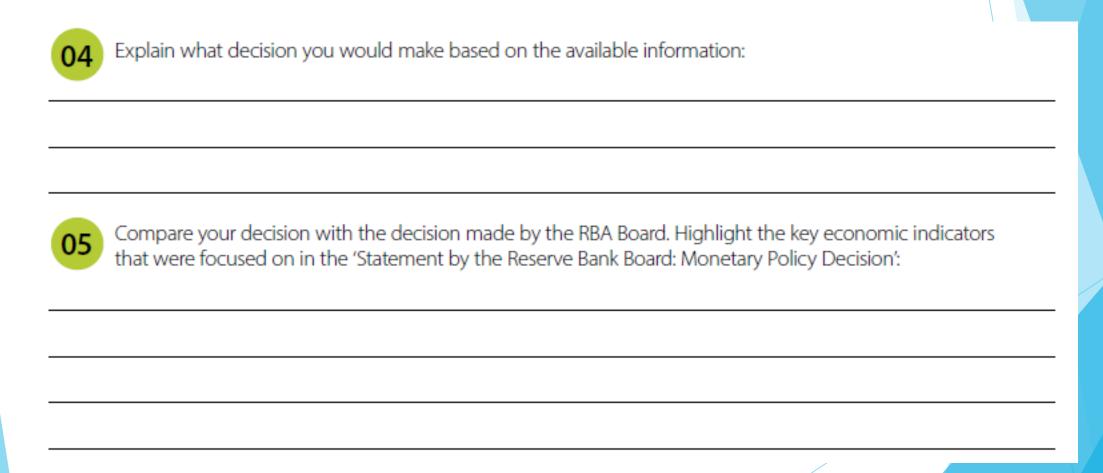
#### **Labour Underutilisation Rates**



What would we say about recent economic (GDP) growth & labour market data in terms of the likely influence on future RBA MP decision?

- 01 What is the effect of an increase in the indicator on the cash rate decision
- O1 What is the effect of a decrease in the indicator on the cash rate decision
- ldentify charts that show changes in the indicator
- 03 Identify recent changes/trends in the indicator

# Students write up decision - compare to RBA Board decision and reasoning



# Two interactive resources you must use!

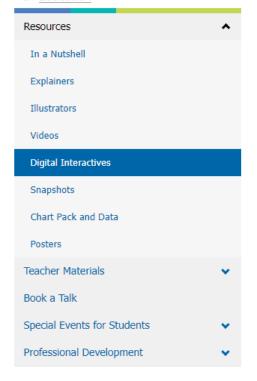


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#### In Education



#### **Digital Interactives**

Our digital interactives are interactive tools that help students learn about economic concepts.

#### Inflation Explorer

The Inflation Explorer is an interactive tool that lets the user explore how prices of individual goods and services, and overall inflation, have changed over time.

Average annual price change 2.5%

#### **Snapshot Comparison**

This interactive tool allows you to compare snapshots of the economy at different points in time.



# Consumer Goods and Services (CPI)



\$ 100

Calculate

\$ 510.15

Consumer Goods and Services (CPI)



Total price change 410.2%



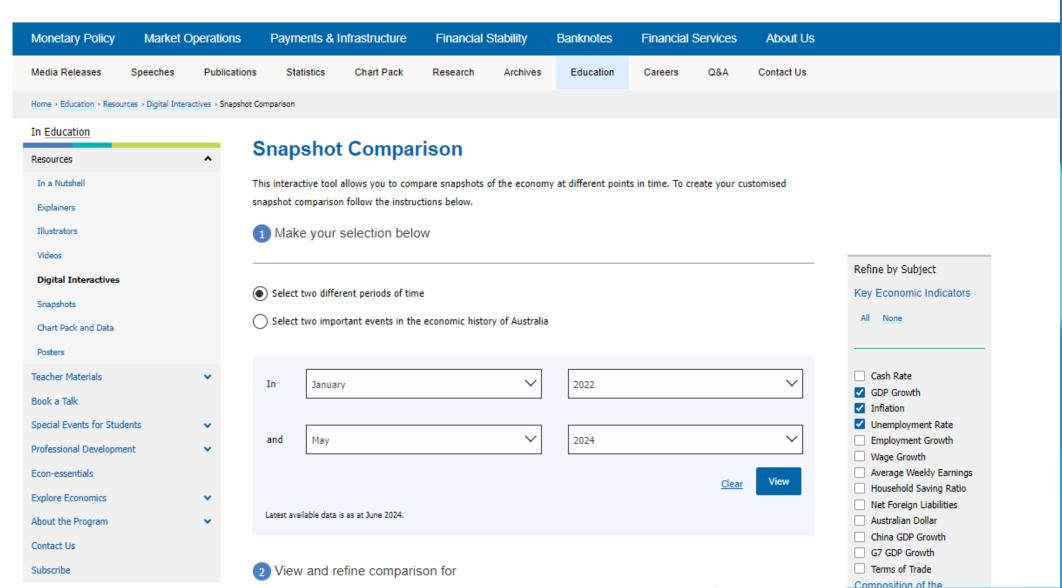
Average annual price change

3.9%

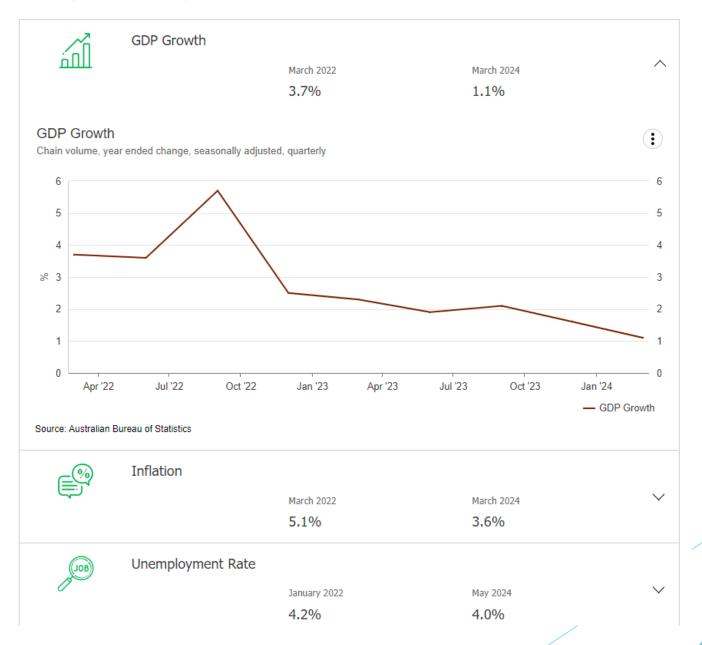


For a household that spent \$100 per week in 1980, the equivalent amount would have been \$510.15 in 2023.





#### January 2022 and May 2024



# Another excellent resource ...

# RBA Speeches



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2023

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2011–2020 

2001–2010 

1990–2000 

Filters

All Governors' Speeches 

Speeches by Michele Bullock

All Deputy Governors' Speeches 

Testimonies before Parliament

Media Conferences

Senior officers of the Reserve Bank give speeches and participate in panel discussions on a broad range of topics related to its role and functions. These are part of the Bank's efforts to promote understanding of its decision-making and facilitate accountability to accompany its operational independence.

Request for RBA speakers can be submitted online via Event invitations form. For more information, please see Arrangements for Speeches.

#### 2024

Remarks at the Pacific Banking Forum 2024 Dinner - Brisbane

8 July 2024

Michele Bullock, Governor

Audio 41 3.71MB

Strangers in Paradise - Sydney

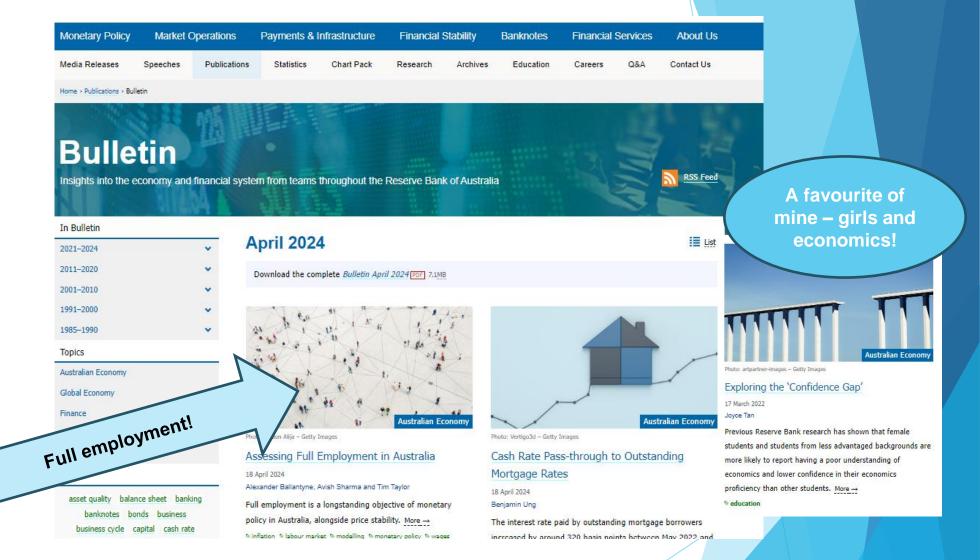
27 June 2024

Andrew Hauser, Deputy Governor

### **Publications:**

RBA Bulletin

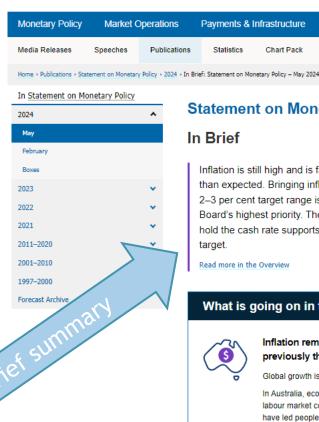
'Stand alone' articles



# Statement on Monetary **Policy**

'In Brief'- new way to deliver information

*Increasingly* accessible @



#### Statement on Monetary Policy - May 2024

Financial Stability

#### In Brief

Inflation is still high and is falling more slowly than expected. Bringing inflation down to the 2-3 per cent target range is the Reserve Bank Board's highest priority. The Board's decision to hold the cash rate supports inflation returning to

Read more in the Overview

Payments & Infrastructure

#### Statement on Monetary Policy

**Banknotes** 

Read the full SMP

Financial Services

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How do we see the economy developing?



Economic growth is expected to pick up gradually here and overseas.

Earlier interest rate rises and weak spending by consumers is likely to weigh on economic growth this year. Growth is expected to pick up gradually in 2025 as a recovery in real incomes supports an increase in household spending



The labour market is expected to ease further

The outlook for the labour market remains uncertain. Unemployment is expected to increase more gradually than previously anticipated and wages growth is expected to soften over the next



Inflation is expected to reach the 2-3 per cent target range in the second half of 2025.

Inflation is expected to be higher in the near term than previously thought due to the stronger labour market and higher petrol prices. But inflation is still expected to return to the target range in the second half of 2025 and to reach the midpoint in 2026.

CPI Inflation Forecast 2-3% target range

#### What is going on in the economy?



Inflation remains high and is falling more gradually that previously thought.

Global growth is subdued and inflation is above target in many countri

In Australia, economic growth also remains slow. Inflation has been his labour market conditions have proven stronger than anticipated. Overa have led people to cut back on spending. This is slowing economic gro into better balance with supply. Labour market conditions have eased remains low.

Accessible language & images/ charts

# An aside: - Subject Selection: Promoting Economics

Speech Skills for the Modern Workforce

Alexandra Heath

Head of Economic Analysis Department

Remarks to the Victorian Career Advisors conference

Melbourne - 1 December 2017

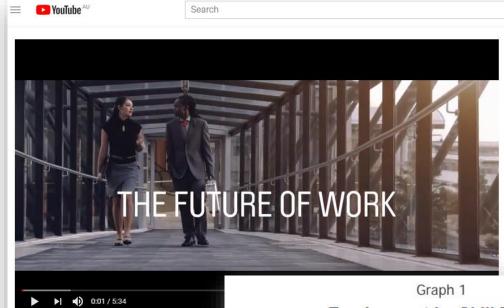


The Future of Work

It isn't hard to find commentary about the fact that the nature of work is changing, potentially in quite profound ways. This means that the skills young people will need to negotiate the new landscape of work need to change as well. But what does it all mean for students who must decide what subjects to choose in high school or what they should do after school?

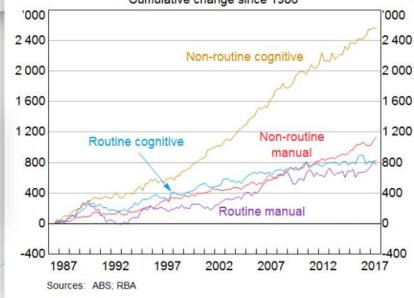
It is difficult to answer this question in general, because each young person is different in their skills, preferences and aspirations. The best we can do is to make sure they have good information about the options they have available. Plenty of studies have shown how important parents (and their life experiences) are as sources of information about subject and career choices. Young adults (and their parents) also look to career advisors for information and advice.

Today, I'm going to give you some information about how the skills used in the workforce have been changing over time to help you frame the discussions you have with your students. I'm also going to take a bit of time to advocate for economics as a discipline of study that provides skills that are likely to be valuable in the future workforce.



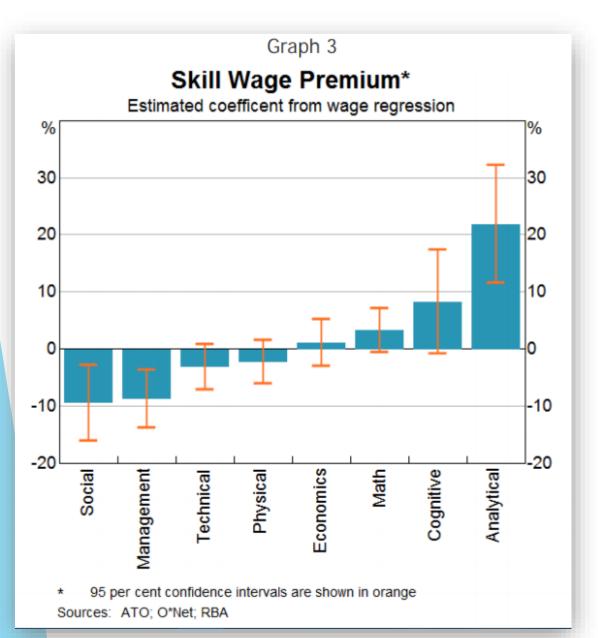
#### **Employment by Skill Type**

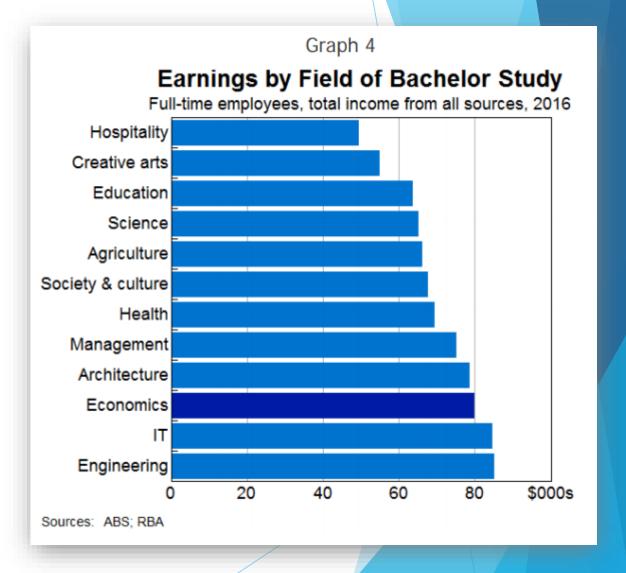
Cumulative change since 1986



# Cognitive skills of Economics

# Promoting Economics - "Show me the money!!"





Graphs and 'content'

#### The State of Economics

#### Jacqui Dwyer

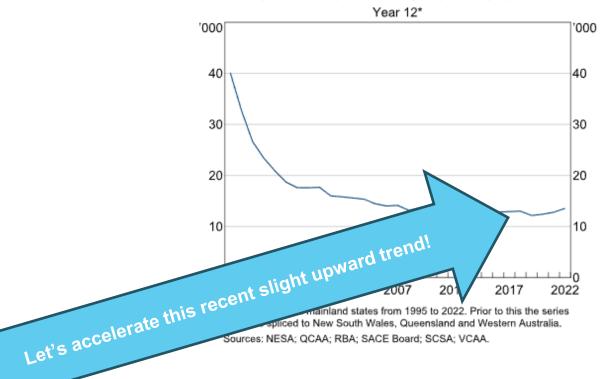
Head of Information Department

Address to The Economic Society of Australia

Sydney - 28 May 2024



Graph 1 **Economics Enrolments in Australia** 



liced to New South Wales, Queensland and Western Australia. Sources: NESA; QCAA; RBA; SACE Board; SCSA; VCAA.

Graph 2 **Economic Enrolments in Australia** 

