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Delivery Notes

Our Economy: Performance of the Australian Economy

The RBA's public education program is committed to supporting students and teachers of economics and economics-related subjects. We have developed a suite of resources aimed to support a number of commerce and economics curriculum objectives for Years 7–10. In this topic, students will be introduced to the ways we can measure the performance of the Australian economy using key indicators, in particular through reading and interpreting charts of these indicators.

Resources

The following resources have been designed to be used flexibly, according to the time you have available and the learning needs of your students. You can use all or select the ones most relevant to the objectives you wish to cover.

Learning themes

The indicators of, and influences on, the performance of the Australian economy, including:

- ways of assessing the performance of the Australian economy, e.g. economic growth
- government economic policy tools macro (monetary policy/fiscal policy) and micro (trade, education, productivity)

The performance of the Australian economy using key indicators, including:

- economic growth rates, unemployment trends, inflation rates and the cash rate target
- possible reasons for its performance
- a comparison of its performance with that of India

Key words

cash rate, consumption, economic growth, employment, fiscal policy, GDP, inflation, investment, labour market, macroeconomics, microeconomics, monetary policy, productivity, trade, trend

Resource	Summary
Delivery Notes – Our Economy: Performance of the Australian Economy	A summary of available resources and how they could be used within a classroom setting, as well as background information
Presentation – Performance of the Australian Economy	A PowerPoint covering some key economic indicators, and how these can help to assess the performance of the Australian economy, as well as introducing students to macro and micro tools to influence the economy's performance (monetary policy, fiscal policy and microeconomic reform)
Activity – Analysing Australia's Economic Performance	An activity in which students examine charts on economic growth (GDP growth), unemployment rate, inflation and the cash rate in order to build a picture of the performance of the Australian economy
Activity – Comparing the Australian and Indian Economies	An activity in which students compare charts on GDP growth for Australia and India
Digital Interactive – Snapshot Comparison	A digital tool that lets students compare economic indicators at different points in time, as well as generate charts for the time period chosen. Found at: https://www.rba.gov.au/education/resources/digital-interactives/snapshot-comparison/
Digital Interactive – Inflation Explorer	A digital tool that lets students explore how prices of individual goods and services, and overall inflation, have changed over time. Found at: < https://www.rba.gov.au/education/resources/digital-interactives/inflation-explorer/>

Performance of the **Australian Economy**

Example learning journey

The following is an example of how the resources could be used in a sequence of learning activities. You can decide which activities would work best with your class and the time period over which the learning takes place.

Useful prior knowledge and skills

Before beginning this topic, it may be beneficial for students to complete the RBA's 'The Nature of the **Economy**' resource suite, which covers what an economy is and the circular flow model, as well as 'Reading and Interpreting Charts' resource suite, which helps students develop the skills they will need to analyse economic charts.

Baseline assessment of students' existing knowledge

Slide 2 of the Presentation – Performance of the Australian Economy contains key words for this topic. You may wish to show these to students at the start of the first lesson. They could work in groups or individually to consider any of the words they are familiar with or create a basic mind map showing any connections between the words.

Introducing the economy

Slides 3 and 4 introduce students to the Australian economy, highlighting its relevance to their own lives. Again, it would be useful for students to have been through the Presentation – What is an Economy? from the RBA's 'The Nature of the Economy' resource suite.

Assessing the performance of the Australian economy

Slides 5 and 6 introduce the kind of analysis economists undertake to measure the performance of the Australian economy and covers some key economic indicators used to assess performance (including at the RBA).

Economic growth

Slides 7 to 9 cover GDP growth and the concept of an optimal rate of economic growth.

Background information:

Economic growth is the change in the size of an economy over time, measured by real gross domestic product (GDP). GDP measures the change in aggregate demand in an economy in three different ways – spending on goods and services, production of goods and services or income earned by households plus profits earned by businesses. GDP as measured by spending on goods and services is most relatable for students, so that is the measure used in these resources. You could note that GDP only measures **new** spending on goods and services over a period of time (i.e. GDP measures the **flow** of spending in the economy). The Australian Bureau of Statistics (ABS) publishes data on GDP in the National Accounts once every quarter.

The resources state that economic growth has a 'speed limit', which is used as an analogy for the concept of potential economic growth. Potential economic growth occurs when an economy is operating at 'full capacity', such that the aggregate demand for goods and services grows at the same speed as the aggregate supply of goods and services. When an economy grows at its potential, inflation should be low and stable and everyone who wants a job should have one, and work as many hours as they desire (called full employment). This is why potential economic growth is considered optimal and is a good way to link the key indicators of economic performance together.

If an economy is growing faster than its potential (i.e aggregate demand is growing faster than aggregate supply) an economy is said to be operating above its full capacity and there will not be enough workers to fill the available jobs. Wage and price pressures will build and inflation will increase. On the other hand, if an economy is operating below its full capacity, then unemployment will be too high and inflation too low. These relationships are represented by the 'business cycle', which you can find more information on in the RBA's 'The Nature of the Economy' resource suite.

There is no way for economists to measure the true level of potential economic growth for an economy, but they can estimate it. Potential growth is different for each economy and changes over time as the growth in aggregate supply changes. Growth in aggregate supply is affected by factors such as population growth, productivity growth (the change in the amount of output produced from a given amount of inputs) is and growth in the capital stock (the change in the amount of capital an economy uses to produce goods and services). You could think about these factors as affecting an economy's capacity to produce goods and services. A technical RBA research paper in 2015 estimated Australia's potential economic growth between 2¼ to 3¾ per cent per year (Lancaster and Tulip 2015) though this is subject to considerable uncertainty (particularly during the COVID-19 pandemic). You can find a more recent explanation of potential economic growth in advanced economies in an RBA Bulletin: Arsov and Watson (2019).

For more information on economic growth see our other resources on the topic:

- Explainer: Economic Growth
- **Explainer: Productivity**
- Video Explainer: Economic Growth (in particular, videos on 'Gross Domestic Product' and 'Aggregate Demand and Aggregate Supply')
- Video Explainer: Australia's Inflation Target

Unemployment

Slides 10 to 12 cover groups in the labour market, how the unemployment rate is measured and what spare capacity in the labour market can mean for the economy.

Background information:

Labour market data are used to measure the employment 'status' of people of working age (15–65 years old). These data are used to calculate important labour market ratios related to the amount of people in the labour force available to work, but not working at all or as many hours as they desire (i.e. the unemployment rate and underemployment rate). They also tell us the share of the working age population involved in the labour force in some capacity (i.e. the participation rate and employment-to-population ratio). The ABS publishes labour market data every month in its release, Labour Force, Australia. https://www.abs.gov.au/statistics/ labour/employment-and-unemployment/ labour-force-australia/latest-release>

These ratios help economists to assess 'spare capacity' in the labour market. Spare capacity measures how many people that are currently not working are available to work (or work more than they currently are). Together, the unemployment and underemployment rates measure the share of the labour force considered as spare capacity. Spare capacity changes as the unemployment and underemployment rate do (for example, if these ratios fall so does spare capacity). However, it is important to remember that these ratios change not only with employment, but also with the size of the labour force. If the labour force grows relative to the working age population (such that the participation rate increases), then there are more people available to work. As a result, spare capacity in the labour market will increase even if the amount of people that are employed and the hours those people work does not change (or

increases more slowly than the participation rate). Therefore, the participation rate is also an important labour market ratio to keep in mind when measuring spare capacity in the labour market.

The economy has reached a state of optimal or 'full' employment when there is no spare capacity. However, keep in mind that the unemployment rate will not be zero when the economy is at full employment. This is because some types of unemployment (e.g. structural, frictional) will always exist. This is because someone who is structurally or frictionally unemployed is not available to work in the jobs that need filling. Full employment is determined by the amount of structural and frictional unemployment in the labour force, as well as things like the participation rate (which is influenced by work preferences and population growth, among other things) and productivity growth. The level of full employment can therefore change over time.

Economists cannot observe the true level of full employment, but can estimate it using something called the NAIRU (non-accelerating inflation rate of unemployment). When the labour market has no spare capacity but unemployment decreases, wage pressures build as firms compete for workers and offer higher wages (resulting in higher inflation). On the other hand, if the labour market has spare capacity, prospective workers will fill jobs that become available and unemployment can fall without firms needing to increase wages. (Read the Assistant Governor Luci Ellis's speech Watching the **Invisibles** for a discussion of the NAIRU and recent estimates, bearing in mind that the COVID-19 pandemic is likely to have affected these estimates.)

For more information on the labour market see our other resources on the topic:

- Explainer: Unemployment Its Measurement and Types
- Video Explainer: Unemployment and the **Labour Market**

Inflation

Slides 13 to 16 cover why inflation is important, the effects of inflation being too high or low, and how inflation is measured.

Background information:

Inflation is measured by the increase in the consumer price index (CPI) over time. CPI measures changes in the prices of a 'basket' of goods and services purchased by the average household. It is important to remind students that this basket of goods and services is probably different to the goods and services purchased by their own household.

Inflation is an important indicator of economic performance because it measures how the purchasing power of incomes changes over time. Both excessively high and excessively low inflation can affect the economy negatively either through lower incomes (in real or inflation-adjusted terms) or higher unemployment and lower economic growth. Stable inflation is also important because it helps households and businesses feel confident about the likely prices of goods and services in the future, helping them to better plan their spending decisions.

Inflation that is reasonably low and stable is usually observed alongside full employment and an economy that is growing at its potential (or speed limit). This is because outcomes where employment and economic growth are away from their optimal values are usually associated with higher or lower wage and price pressures (wages are an important input cost into producing goods and services and therefore influence inflation).

For more information on inflation see our other resources on the topic:

Explainer: Inflation and its Measurement

 Video Explainer: Inflation and its Measurement

To help students better understand how the CPI basket works, you could ask them to use the Digital Interactive: Inflation Explorer

Tools to influence economic performance

Slide 17 introduces the idea that there are tools – micro and macro – that the government and RBA can use to try to influence what happens in the Australian economy.

Monetary policy

Slides 18 to 21 provide students with an understanding of monetary policy, the role of the RBA, and how monetary policy can influence the economy.

Background information:

The RBA uses monetary policy to help manage the economy. The RBA has three objectives in setting monetary policy: stability of the currency (low and stable inflation), full employment and the economic prosperity and welfare of the Australian people.

Monetary policy operates by influencing interest rates in the economy. The main way the RBA does this is by setting the target for the cash rate. The cash rate is an overnight interest rate that affects the interest rates that households, businesses and the government pay to borrow money and receive for saving money. Interest rates influence households' and businesses' decisions to invest or consume. which ultimately affects aggregate demand and economic growth. By managing aggregate demand, the RBA can affect where economic growth is relative to its speed limit, which also

affects spare capacity in the labour market. Both of these factors influence price and wage pressures, thereby influencing inflation. You might like to relate this process to the RBA 'smoothing' the business cycle, as described in the RBA's 'The Nature of the Economy' resource suite.

The RBA sets monetary policy using a flexible inflation target. This aims to set monetary policy to achieve CPI inflation of 2–3 per cent per year (meaning the cost of a 'basket' of goods and services purchased by the average household would increase by 2-3 per cent per year). The flexibility of the inflation target means that inflation does not need to be in the target range at all times, but on average, over time. Inflation can be affected by temporary influences, such as supply disruptions or a tax change, which monetary policy should not respond to (for example, a temporary increase in the prices of fruits and vegetables resulting from a natural disaster). Inflation that is in the target range has historically been associated with economic growth that is close to its estimated speed limit and a labour market that is close to operating with no spare capacity.

For more information on monetary policy see our other resources on the topic:

- Explainer: What is Monetary Policy?
- **Explainer: Transmission of Monetary Policy**
- **Explainer: Australia's Inflation Target**
- Video Explainer: Monetary Policy

Fiscal policy

Slide 22 briefly covers how the government can use fiscal policy (government spending and taxation) to influence aggregate demand. By affecting aggregate demand, fiscal policy also influences economic growth, spare capacity in the labour market and inflation.

Microeconomic policy

Slide 23 provides an overview of how microeconomic tools, such as education, can be used by the government to increase an economy's productivity. This increases growth in an economy's aggregate supply over time, which increases its speed limit or potential economic growth.

Assessing Australia's economic performance

Activity idea (Slide 24): Students could be organised into pairs or small groups and given Activity – Assessing Australia's Economic **Performance**. The activity is split into three parts and is designed to help students analyse the performance of the Australian economy, with the help of the Digital Interactive - Snapshot Comparison. (Again, it may be useful for students to view the Videos – Reading and Interpreting Charts to develop their chart analysis skills before completing the activity.)

- In Part 1, students investigate the current values of key economic indicators (economic growth rate, inflation rate, unemployment rate and the cash rate) to form a picture of the latest economic conditions.
- In Part 2, students describe recent trends, reading and interpreting economic charts for the period since January 2019.
 - In Part 3, students explore current economic performance in the context of a longer time period (since 1993), estimating the series average for each indicator and comparing this with the current values. This section resembles how economists think about current economic conditions in the context of the 'typical' behaviour of economic indicators. The period since January 1993 represents the inflationtargeting era, which is a useful benchmark for considering the performance of economic indicators in Australia.

Depending on the ability level of the class, you may wish to assign each pair or group a single economic indicator to investigate, then have all students discuss their findings together to build up the picture of the economy overall. As an extension, students could be asked to generate their own questions about economic performance.

To calculate the average level of indicators over this period, you may find these data in RBA **Statistical Tables:**

- GDP Growth: Gross Domestic Product and Income - H1, Year-ended real GDP growth
- Unemployment Rate: Labour Force H5, Unemployment rate
- Inflation: Consumer Price Inflation G1, Year-ended inflation
- Cash Rate: Interest Rates and Yields Money Market – Monthly – F1.1, Cash rate target

Using the Digital Interactive -**Snapshot Comparison**

The Snapshot Comparison allows users to compare snapshots of the economy at different points in time by displaying statistics for the points chosen.

For the purpose of the Activity, the Snapshot Comparison can generate charts of key economic indicators (e.g. cash rate target, inflation) over a specific time period.

Instructions for using the tool appear on the Activity sheet. Note that the data for the latest month may not be available for all indicators, because some data are released at a lower frequency or with a longer lag than other data.

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Comparing the Australian and Indian economies

Activity idea (Slide 25): Students are introduced to the importance of other countries' economies to the Australian economy. For the activity, they could again work in pairs or small groups, as they work through Activity - Comparing the Australian and Indian Economies, which requires students to compare charts on GDP growth for Australia and India.

Background information:

India has recorded strong economic growth over the past 4 decades. Over this period, real per capita incomes have increased four-fold. India's share of global output has doubled to 7 per cent, and it is now the world's third largest economy in purchasing power parity terms. India's development lifted over 200 million people out of poverty over the decade to 2015. This growth has been primarily driven by an expansion of the services sector.

Before the onset of the COVID-19 pandemic, India was in the midst of its most significant slowdown in economic growth since the global financial crisis. The slowdown reflected a range of factors, including disruptions associated with partial demonetisation and the introduction of a goods and services tax, and a decline in credit growth associated with structural issues in the financial sector that culminated in the default of a high-profile non-bank financial company.

After the initial COVID-19 outbreak, Indian economic output fell by 25 per cent, one of the largest falls in GDP in the June guarter of 2020 of any economy. This was the result of the stringency and length of India's initial lockdown, which was one of the world's strictest (in terms of both intensity and population covered) and constrained the operations of most businesses.

Looking beyond the pandemic, India's growth outlook remains promising given its favourable economic fundamentals. For instance, United Nations estimates of India's future population dynamics point to continued growth in the working-age population, though the effect of this on the economic outlook depends on education outcomes and whether recent declines in labour force participation persist. In addition, India's productivity is still low, and there is substantial potential for 'catch-up' growth through the adoption of new technologies, movement of workers into higher productivity sectors and locations, and increases in human capital.

However, there are a number of significant challenges that could weigh on the longerterm economic outlook, some of which have been exacerbated by the pandemic. Two key challenges in the recovery phase and beyond will be ensuring the sustainability of government debt and strengthening India's banking system.

Taken from RBA Bulletin: Fairweather and Sutton (2020), Economic Developments in India:

• Economic Developments in India

Assessing students' learning

Students understanding can be evaluated through their answers to the two Activities. You may also wish to show the key words on Slide 2 of the presentation and ask students to create, or amend, their mind maps to reflect their progressed knowledge about the concepts. You could also create a small online guiz that checks students' understanding of the terms, by quizzing them on definitions and uses.

Extension or homework ideas

Students could:

- be on the alert for news items featuring the economy or one of the key economic indicators
- read the latest statements concerning the RBA's cash rate decision: <https://www.rba.gov.au/ statistics/cash-rate/>
- explore charts on additional economic indicators (e.g. wage growth, household saving ratio), using the Digital Interactive - Snapshot Comparison. < https://www.rba.gov.au/ education/resources/digital-interactives/ snapshot-comparison/>
- discuss some of the merits and limitations of each economic indicator - what do they show or not show? (see recommended resources in background notes above for ideas)
- ask the students to 'be the Reserve Bank Board'. They could hold a debate about the current performance of the Australian economy and make predictions about the real Reserve Bank Board's upcoming decision. Students could complete the <https://www.rba.gov.au/ education/resources/learning-activities/pdf/ activity-you-make-the-decision-the-cash-rate. pdf>.