

# QCE Unit 4 Topic 2: Economic Indicators & Past Budget Stances

*Comprehensive Study Guide with 20 Multiple Choice Questions*

## SECTION 1: TYPES OF ECONOMIC INDICATORS

### 1.1 Leading Indicators

- Indicators that change BEFORE the overall economy changes
- Used to forecast future economic conditions (next 6–12 months)
- Examples: Consumer confidence, building permits, share prices, credit growth
- Rationale: These reflect expectations and decisions that precede actual economic activity
- Interpretation: Rising leading indicators suggest expansion ahead; falling suggest contraction

### 1.2 Lagging Indicators

- Indicators that change AFTER the overall economy has already changed
- Used to confirm that a trend is established (historical verification)
- Examples: Unemployment rate, inflation rate, GDP (measured in arrears), wage growth
- Rationale: Takes time for employment, prices, output to reflect economic changes
- Interpretation: Rising lagging indicators confirm contraction is underway; falling confirm expansion

### 1.3 Coincident Indicators

- Indicators that change AT THE SAME TIME as the overall economy
- Used to assess current economic position in real time
- Examples: Industrial production, retail sales, business investment, aggregate demand
- Rationale: These directly measure current economic activity
- Interpretation: Rising = expansion; falling = contraction; stable = equilibrium

### 1.4 Why Multiple Indicators Matter

- No single indicator tells the whole story (each has strengths and weaknesses)
- Leading indicators can be volatile (false signals possible)
- Lagging indicators confirm trends but arrive too late for policy action

- Coincident indicators provide real-time snapshot but limited forward visibility
- Best practice: Use all three types together for comprehensive assessment

## SECTION 2: HOW TO CALCULATE ECONOMIC INDICATORS

### 2.1 Real Economic Growth Rate

- Formula:  $((\text{Real GDP Year 2} - \text{Real GDP Year 1}) \div \text{Real GDP Year 1}) \times 100$
- Example: Real GDP 2023 = \$2.05t, Real GDP 2024 = \$2.07t
- Calculation:  $((2.07 - 2.05) \div 2.05) \times 100 = 0.98\%$  growth
- Key point: Uses inflation-adjusted figures (not nominal)
- Interpretation: Positive = expansion, negative = contraction,  $>2\%$  = healthy trend growth

### 2.2 Inflation Rate

- Formula:  $((\text{CPI Current Year} - \text{CPI Previous Year}) \div \text{CPI Previous Year}) \times 100$
- Example: CPI 2024 = 115, CPI 2023 = 110
- Calculation:  $((115 - 110) \div 110) \times 100 = 4.55\%$  inflation
- Interpretation: RBA target 2–3%; above = problematic; below = deflation risk
- Note: Also look at headline vs. underlying inflation for detail

### 2.3 Unemployment Rate

- Formula:  $(\text{Number of Unemployed} \div \text{Labour Force}) \times 100$
- Labour Force = Employed + Unemployed (actively seeking)
- Example: Unemployed 0.9m, Labour Force 13.1m  $\rightarrow U = (0.9 \div 13.1) \times 100 = 6.87\%$
- Interpretation: Below NAIRU (4–4.5%) = tight market; above = slack
- Key limitation: Doesn't capture underemployment or hidden unemployment

### 2.4 Participation Rate

- Formula:  $(\text{Labour Force} \div \text{Working-Age Population}) \times 100$
- Working-age = 15+ years old
- Example: Labour Force 13.1m, Working-age pop 18.2m  $\rightarrow P = (13.1 \div 18.2) \times 100 = 71.98\%$
- Interpretation: Rising = more people seeking work; falling = discouraged workers leaving
- Australia's rate ~66–67% (affected by demographics, education, migration)

### 2.5 Real Wage Growth

- Formula:  $((\text{Nominal Wage Growth} - \text{Inflation Rate}) \div (1 + \text{Inflation Rate})) \times 100$

- Simpler approximation:  $\text{Nominal wage \%} - \text{Inflation \%}$
- Example: Wages +4%, Inflation +6% → Real wages  $\approx -2\%$
- Interpretation: Living standards falling if negative; rising if positive

## SECTION 3: ASSESSING POSITION ON THE ECONOMIC CYCLE

### 3.1 Expansion Phase Indicators

- Leading: Consumer confidence rising, building approvals up, share prices climbing
- Coincident: Retail sales growing, business investment increasing, employment rising
- Lagging: Unemployment falling, wage growth accelerating, inflation starting to rise

### 3.2 Peak Phase Indicators

- Leading: Consumer confidence plateau/falling, credit growth excessive, yield curve flattening
- Coincident: GDP growth accelerating, capacity utilization high, inflation rising
- Lagging: Unemployment at/below NAIRU, wage growth strong, inflation clearly rising

### 3.3 Contraction Phase Indicators

- Leading: Consumer confidence collapsing, credit growth slowing, building approvals falling
- Coincident: Retail sales falling, business investment declining, employment stalling
- Lagging: Unemployment rising, wage growth slowing, inflation still elevated (sticky)

### 3.4 Trough Phase Indicators

- Leading: Consumer confidence stabilizing, credit growth bottoming, business optimism emerging
- Coincident: Retail sales flat, investment bottomed, employment stabilizing
- Lagging: Unemployment peaking, wage growth minimal, inflation falling

## SECTION 4: PHILLIPS CURVE & TRADE-OFFS

### 4.1 Short-Run Phillips Curve (SRPC)

- Downward-sloping relationship: Lower unemployment → Higher inflation
- Reflects trade-off available in short run (6–18 months)
- Assumption: Inflation expectations are fixed/anchored
- Policy implication: Central bank can choose point on SRPC (unemployment vs. inflation)

## 4.2 Long-Run Phillips Curve (LRPC)

- Vertical line at NAIRU: Only one unemployment rate consistent with stable inflation long-term
- Reflects expectations adjustment: If policymakers exploit SRPC, expectations rise → SRPC shifts
- Cannot permanently reduce unemployment below NAIRU without accelerating inflation
- Policy implication: Long-run trade-off is impossible; focus on NAIRU/structural policies

## 4.3 Shifts in SRPC

- Upward shift (worse trade-off): Supply shocks (oil spike), inflation expectations rise, stagflation risk
- Downward shift (better trade-off): Supply improvements, inflation expectations fall, disinflationary environment
- Example: 2022–23 SRPC shifted up (energy shocks, wage expectations); RBA tightening shifted it back down

## 4.4 Trade-offs & Conflicting Objectives

- Short run: Can reduce unemployment (cost: higher inflation) or reduce inflation (cost: higher unemployment)
- Long run: Cannot reduce unemployment below NAIRU permanently without accelerating inflation
- Intertemporal: Today's tight policy (higher unemployment) allows tomorrow's looser policy (lower inflation expectations)
- Example: 2022–24 RBA tightening → 425bp rate rises → temporary unemployment rise → inflation fell

# SECTION 5: EVALUATING ECONOMIC INDICATORS

## 5.1 Accuracy Issues

- GDP data revised multiple times: First estimate, second, third, final (6+ months)
- Unemployment: Doesn't capture underemployment, hidden unemployment, or quality of jobs
- Inflation: CPI uses basket of goods; may not reflect individual household prices
- Consumer confidence: Can be volatile, sometimes inconsistent with actual spending

## 5.2 Reliability Issues

- Seasonality: Retail sales peak December, tourism high in summer (need seasonal adjustment)

- Structural breaks: Data series may change methodology (unemployment definitions changed 1978, 1994, 2008)
- Lag in publication: Latest unemployment data is 1 week old; GDP data 2 months old
- Measurement error: Sample surveys may have margins of error ( $\pm 0.2\%$  for unemployment)

### 5.3 Efficacy in Measuring Objectives

- GDP growth: Good proxy for objective #1 (economic growth) but misses distribution & sustainability
- Unemployment rate: Imperfect measure of objective #2 (employment) - use underutilisation rate instead
- CPI inflation: Targets objective #3 (price stability) but headline volatile, underlying better
- Current account deficit: Measures objective #4 (external stability) but needs context
- Income per capita: Better measure of objective #6 (living standards) than GDP alone

## SECTION 6: PAST AUSTRALIAN FEDERAL BUDGETS (2015–2024)

### 6.1 Budget Stance Framework

- Expansionary: Deficit ( $G > T$ ), stimulus to economy, increases AD
- Contractionary: Surplus ( $G < T$ ), restraint on economy, decreases AD
- Neutral: Balanced ( $G = T$ ), no net fiscal impulse
- Assessment: Look at both total and structural budget position

### 6.2 2015–2016 Budget (Turnbull Government)

- Cycle position: Post-mining-boom, sluggish growth ( $\sim 2\text{--}2.5\%$ ), unemployment  $\sim 5\text{--}6\%$
- Stance: Slightly expansionary (deficit \$37bn), company tax cuts proposed
- Rationale: Weak growth, high unemployment  $\rightarrow$  needed stimulus
- Effect: Growth remained weak, unemployment slow to fall (lags expected)

### 6.3 2017–2018 Budget (Turnbull Government)

- Cycle position: Early expansion (growth  $2.5\text{--}3\%$ ), unemployment falling ( $\sim 4.5\%$ )
- Stance: Slightly expansionary (deficit \$23bn), income tax cuts, infrastructure spending
- Rationale: Below-trend growth, stimulus to support expansion
- Effect: Multiplier effects supported continued recovery toward 2018 peak

#### 6.4 2019–2020 Budget (Morrison Government) – COVID Shock

- Cycle position: Trough/sharp contraction (unemployment spike 7.2%)
- Stance: Highly expansionary (deficit \$85bn), JobKeeper, cash transfers
- Rationale: Emergency response to pandemic, prevent depression-level contraction
- Effect: Massive stimulus (multiplier 1.5–2.0), prevented unemployment >10%

#### 6.5 2021–2022 Budget (Morrison Government) – Early Recovery

- Cycle position: Strong recovery (GDP growth 8.6%), unemployment falling rapidly
- Stance: Continued expansionary (deficit \$80bn), extended JobKeeper, extra payments
- Rationale: Recovery still fragile, unemployment still elevated
- Effect: Combined with RBA's low rates, created boom conditions (too stimulatory in hindsight)

#### 6.6 2022–2023 Budget (Albanese Government) – Peak/Contraction

- Cycle position: Peak conditions (unemployment 3.4–3.5%, inflation 8.4%), then contraction
- Stance: Slightly contractionary (deficit \$37bn, but reducing), cost-of-living relief targeted
- Rationale: Inflation crisis required restraint, but cost-of-living squeeze needed support
- Effect: Conflicting objectives—fought inflation but also helped struggling households

#### 6.7 2023–2024 Budget (Albanese Government) – Trough

- Cycle position: Contraction/trough (growth 0.2% YoY, unemployment rising to 4.1%)
- Stance: Slightly expansionary (deficit \$21bn, targeted relief), energy support, childcare
- Rationale: Weak growth, cost-of-living crisis, need support without massive stimulus
- Effect: Multiplier effects modest (higher MPS, import leakage); supported demand without overheating

## SECTION 7: EVALUATING GOVERNMENT ECONOMIC MANAGEMENT

### 7.1 Assessing Macro Objective Achievement

- Objective 1 (Growth): Achieved 2–3% trend growth 2015–2021; fell below 1% 2023–2024 (mixed)

- Objective 2 (Employment): Unemployment fell from 5.7% (2014) to 3.4% (2022); rose to 4.1% (2024) (mixed)
- Objective 3 (Inflation): Maintained 2–3% target 2015–2021; overshoot 8.4% (2022), recovering 2024 (improving)
- Objective 4 (External stability): Current account deficit ~3% (manageable but rising) (acceptable)
- Objective 5 (Sustainability): NDIS costs rising unsustainably; climate policies emerging (work in progress)
- Objective 6 (Living standards): Real wages down 4.5% (2020–24) – major failure (poor)

## 7.2 Effectiveness of Budget Timing & Design

- COVID stimulus: Well-timed (immediate), massive effect (prevented depression), but excessive in hindsight
- 2021–22 recovery stimulus: Poorly timed (during peak boom), contributed to inflation overshoot
- 2023–24 targeted relief: Better-timed (during contraction), but limited multiplier (high savers, imports)
- Learning: Timing matters more than size; design (who receives?) affects multiplier through MPC

## 7.3 Cyclical vs. Structural Fiscal Position

- Cyclical deficit: Part caused by weak cycle (tax revenue down, welfare up) – automatic stabilisers
- Structural deficit: Underlying imbalance between government spending & revenue—requires reform
- Example: 2024 deficit \$21bn; perhaps \$5–10bn cyclical, \$11–16bn structural → requires spending cuts/tax rises
- Long-term challenge: Aging population (pensions), NDIS costs rising → structural deficit growing

## MULTIPLE CHOICE QUESTIONS

20 Questions Covering Unit 4 Topic 2 Content

### Question 1

Which type of economic indicator is consumer confidence best classified as?

- A. Lagging indicator—consumer sentiment changes after economic conditions shift
- B. Leading indicator—reflects future spending expectations and decisions
- C. Coincident indicator—directly measures current consumer spending activity
- D. Structural indicator—measures long-term consumer behaviour patterns

### Question 2

If Real GDP in 2023 was \$2.05 trillion and Real GDP in 2024 was \$2.07 trillion, what is the real economic growth rate?

- A. 0.98%
- B. 2.0%
- C. 1.98%
- D. 1.02%

### Question 3

The unemployment rate fell from 5.0% to 4.2%. Assuming a labour force of 13.5 million, approximately how many additional people gained employment?

- A. 108,000
- B. 540,000
- C. 675,000
- D. 1,080,000

### Question 4

Which of the following best illustrates the difference between lagging and leading indicators?

- A. Lagging indicators forecast future conditions; leading indicators confirm past trends
- B. Leading indicators change before the economy shifts; lagging indicators change after
- C. Lagging indicators are less reliable; leading indicators are always accurate

- D. Leading indicators measure stock markets; lagging indicators measure employment

### Question 5

Nominal wages grew 3% in 2024, while inflation was 3.5%. What is the approximate real wage change?

- A. 0.5% increase
- B. -0.5% decrease
- C. 6.5% increase
- D. Cannot be determined without employment data

### Question 6

During the expansion phase of the economic cycle, which combination of indicators would you expect to observe?

- A. Rising consumer confidence, falling employment, rising inflation
- B. Rising consumer confidence, rising employment, rising inflation
- C. Falling consumer confidence, rising unemployment, falling inflation
- D. Flat consumer confidence, stable employment, stable inflation

### Question 7

Why is unemployment classified as a lagging indicator rather than a leading indicator?

- A. Unemployment is determined by government policy, not economic conditions
- B. Firms take time to lay off workers after economic downturn begins; hiring takes time during recovery
- C. Unemployment data is published with a 6-month delay
- D. Unemployment doesn't actually correlate with the economic cycle

### Question 8

The participation rate is 66% and the working-age population is 18 million. What is the approximate labour force size?

- A. 11.88 million
- B. 12.5 million
- C. 13.1 million
- D. 18 million

### Question 9

Which scenario represents a shift in the Short-Run Phillips Curve versus a movement along it?

- A. Unemployment falls from 4.5% to 4% at the same inflation rate (shift)
- B. Inflation rises from 2% to 3% as unemployment falls from 4.5% to 4% (movement along)
- C. Oil prices spike, pushing inflation up without change in unemployment (shift)
- D. Central bank tightens policy, reducing inflation and raising unemployment (movement along)

### Question 10

What is the key difference between the short-run Phillips Curve and the long-run Phillips Curve?

- A. The short-run is downward-sloping; the long-run is vertical at NAIRU
- B. The short-run is vertical; the long-run is downward-sloping
- C. They are identical; the distinction is just about time measurement
- D. The long-run curve doesn't exist in modern economics

### Question 11

The 2022–2023 Australian budget deficit widened from \$37bn to \$43bn despite the government's intent to consolidate. Which is the most likely explanation?

- A. Discretionary government spending increased significantly
- B. Automatic stabilisers activated as the economy contracted: tax revenue fell and welfare spending rose
- C. Interest rates on government debt increased, inflating deficit
- D. Immigration declined, reducing tax base

### Question 12

In 2020–2021, the Australian government pursued highly expansionary fiscal policy (JobKeeper, cash transfers). What economic cycle position justified this stance?

- A. Peak phase—economy overheating, needed restraint
- B. Trough/contraction phase—emergency response to COVID shock to prevent depression
- C. Expansion phase—supporting natural recovery momentum
- D. Structural downturn—long-term productivity decline

### Question 13

Which is a key limitation of using the unemployment rate as the sole measure of the labour market's health?

- A. It ignores underemployment (part-time workers wanting full-time) and hidden unemployment
- B. It overestimates employment by including government workers
- C. It is published with a 12-month lag, making it outdated
- D. It only measures cyclical unemployment, not structural

### Question 14

Why did the 2021–2022 fiscal stimulus (extended JobKeeper, extra payments) in hindsight appear excessive?

- A. It was implemented during peak boom conditions when unemployment was already 3.4% (below NAIRU)
- B. The RBA was simultaneously tightening policy, creating mixed signals
- C. Inflation overshot to 8.4%, partly due to excess fiscal stimulus
- D. All of the above—poor timing created demand overhang

### Question 15

If the Australian government runs a structural deficit of \$15bn while the cyclical deficit is \$10bn, what is the total budget deficit?

- A. \$5 billion
- B. \$15 billion
- C. \$25 billion
- D. Cannot be determined without knowing the economic cycle phase

### Question 16

Which of the following best explains why the RBA's 425 basis point rate increase (2022–2023) was necessary despite the cost in terms of higher unemployment?

- A. The short-run Phillips Curve showed inflation could be reduced costlessly
- B. Inflation expectations were rising, threatening to shift SRPC upward; tight policy was needed to prevent wage-price spiral
- C. The government demanded rate increases to control the budget deficit
- D. Unemployment was too low, requiring deliberate policy to raise it

### Question 17

Headline inflation (8.4%) exceeded underlying inflation (6.1%) in 2022. What does this indicate about inflation drivers?

- A. Most inflation was temporary/volatile items (energy, food), not core demand-driven price pressures
- B. Core inflation was higher than headline, suggesting demand-pull was dominant
- C. Both are equally concerning and indicate same inflationary pressures
- D. Underlying inflation is always less reliable than headline

### Question 18

Which macroeconomic objective did the Australian government FAIL to achieve during 2020–2024?

- A. Sustainable economic growth (achieved 2–3% trend target)
- B. Full employment (unemployment fell to 3.4%, near NAIRU)
- C. Improved living standards (real wages fell 4.5%, major failure)
- D. External stability (current account deficit manageable at ~3%)

### Question 19

How do coincident indicators differ in their usefulness from leading indicators when assessing the economic cycle?

- A. Coincident indicators forecast future conditions; leading indicators confirm past trends
- B. Leading indicators provide real-time cycle position; coincident measure current activity but no forward visibility
- C. Coincident indicators measure current activity in real-time; leading indicators help forecast next 6–12 months
- D. Both types are equally useful, with no meaningful difference

### Question 20

The 2023–2024 budget included targeted cost-of-living relief (energy support, childcare subsidies) rather than broad stimulus. Why was this design more effective given current conditions?

- A. Targeted support to lower-income households increases MPC, creating larger multiplier effect than broad tax cuts
- B. Energy support directly addresses supply-side inflation without increasing demand
- C. Childcare subsidies increase labour force participation, improving long-run capacity

- D. All of the above—better design, higher MPC, lower inflation risk than broad stimulus

## MARKING GUIDE

### *Answer Key & Explanations*

Q1: B | Q2: A | Q3: A | Q4: B | Q5: B | Q6: B | Q7: B | Q8: A | Q9: C | Q10: A  
Q11: B | Q12: B | Q13: A | Q14: D | Q15: C | Q16: B | Q17: A | Q18: C | Q19: C | Q20: D

### Detailed Explanations

Q1 (B): Consumer confidence reflects future spending expectations—a leading indicator. Rising confidence predicts future spending growth.

Q2 (A):  $((2.07 - 2.05) \div 2.05) \times 100 = (0.02 \div 2.05) \times 100 = 0.98\%$

Q3 (A):  $0.8\text{pp} \times 13.5\text{m} = 0.108\text{m} = 108,000$  people

Q4 (B): This is the core distinction between the two indicator types.

Q5 (B):  $3\% - 3.5\% = -0.5\%$  real wage decline

Q6 (B): Expansion sees rising confidence, employment, and some inflation pressure

Q7 (B): Employment adjusts after business decisions lag economic changes

Q8 (A):  $66\% \times 18\text{m} = 11.88\text{m}$

Q9 (C): Supply shock shifts SRPC; demand changes movement along it

Q10 (A): Fundamental difference in Phillips Curve shapes

Q11 (B): Automatic stabilisers expand deficit during contraction

Q12 (B): Emergency response to pandemic trough

Q13 (A): Labour force underutilisation broader than unemployment

Q14 (D): All factors contributed to excessive stimulus

Q15 (C):  $\$15\text{bn structural} + \$10\text{bn cyclical} = \$25\text{bn total}$

Q16 (B): SRPC shift threatened wage-price spiral

Q17 (A):  $\text{Headline} > \text{underlying} = \text{volatile items driving inflation}$

Q18 (C): Real wages fell 4.5% (2020–24), major failure

Q19 (C): Each indicator type serves different purpose in analysis

Q20 (D): Targeted design addresses multiple policy concerns