Exercise walk-through

5.3
Unemployment and inflation

International Baccalaureate · IB Diploma · Economics · HL

Measuring economic activity (5)

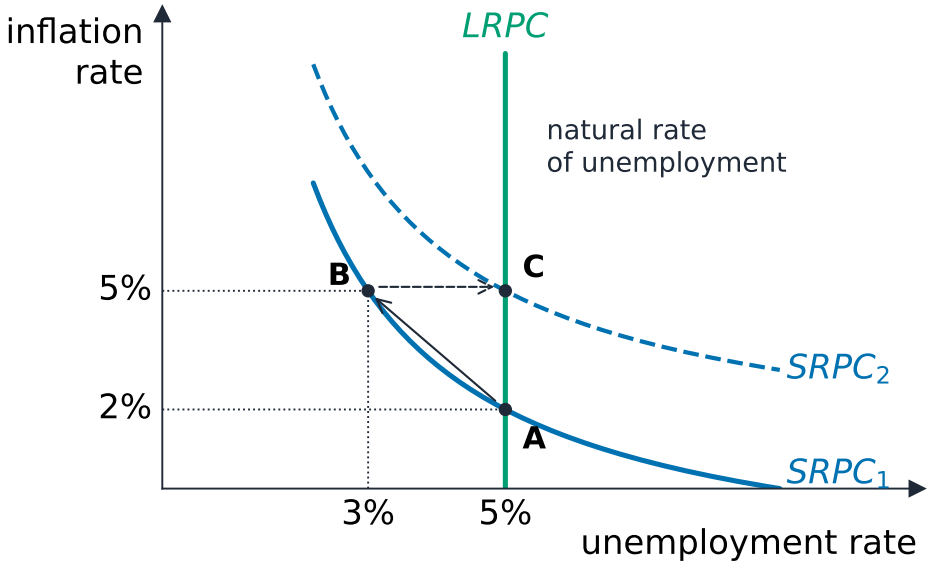
- In a **boom** , output is above **trend**, unemployment is low and **inflation** tends to rise.
- In a **recession** , **real GDP** falls. Often this means two quarters in a row of falling output. Unemployment rises.
- At the bottom (the slump), output is furthest below trend.
- In the **recovery** , output and jobs grow again.

Aggregate demand and aggregate supply (2)

- Output is 10 below full employment. This is a **recessionary gap** (also called a deflationary gap), with cyclical unemployment.
- If AD rises to $P = 105 - Y/2$: $105 - Y/2 = 20 + Y/2$, so $Y = 85$ and $P = 62.5$. Output is 5 above full employment. This is an **inflationary gap** : the price level is pushed up.

$$k = \frac{1}{1 - MPC} = \frac{1}{MPS + MPT + MPM}$$

Figure: Macroeconomic objectives ·



- Pushing unemployment below the natural rate buys only a short-run gain
- Read the axes and units first.

Exercises 2.1·2.2

2.1 Distinguish between structural and cyclical unemployment. [2]



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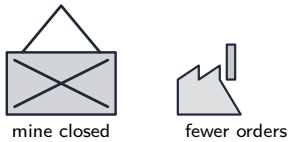
2.2 In a country, 1.8 million people are unemployed and 28.2 million are employed. Calculate the unemployment rate. [2]



labour force

Exercises 2.1·2.2

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2.1

structural: a long-term mismatch between workers' skills or location and the jobs available, e.g. after an industry declines; cyclical: caused by a fall in aggregate demand in a recession

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2.2

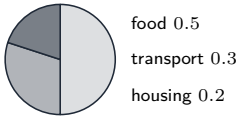
labour force = 30 million; rate = $1.8 \div 30 \times 100 = \mathbf{6}\%$

Exercises 2.3·2.4

2.3 Explain **two** costs of high inflation for an economy. [4]



2.4 A price index has three items. Food has a weight of 0.5 and a price index of 110; transport 0.3 and 105; housing 0.2 and 120 (base year = 100). Calculate the weighted index and the inflation rate. [3]



Exercises 2.3·2.4

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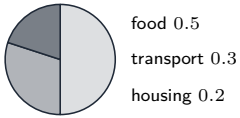


2.3

any two, explained: people on fixed incomes or savers lose purchasing power; uncertainty makes firms delay investment, slowing growth; exports become less competitive if inflation is higher than abroad; menu costs / time spent managing money

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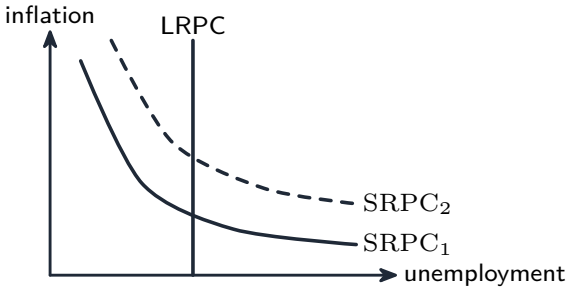
2.4

$0.5 \times 110 + 0.3 \times 105 + 0.2 \times 120 = 55 + 31.5 + 24 = \mathbf{110.5}$; inflation = $\mathbf{10.5}\%$

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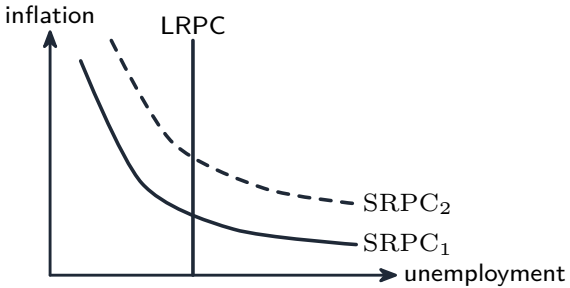
Exercise 2.5

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pushing unemployment below the natural rate raises inflation; workers then expect higher inflation and ask for higher wages, so the short-run Phillips curve shifts up; unemployment returns to the natural rate at a higher inflation rate: no long-run trade-off

Exercise 3.1 (a)

3.1 In one country, prices fell for two years in a row.

(a) Define **deflation**. [2]

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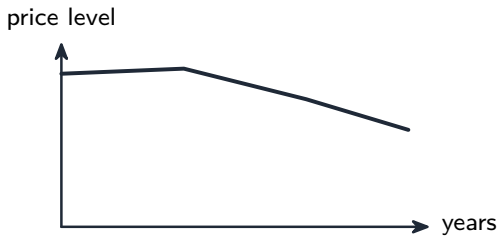
(a) Define **deflation**. [2]

(a) a sustained fall in the general price level

Exercise 3.1 (b)

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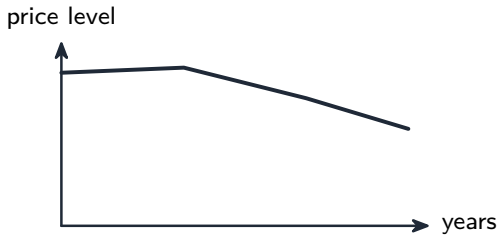
(b) Explain why deflation caused by falling demand may harm the economy. [6]



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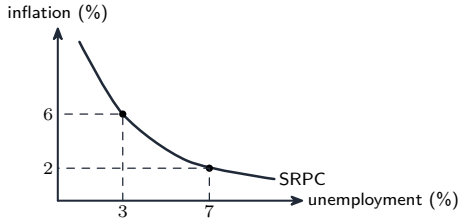
(b) Explain why deflation caused by falling demand may harm the economy. [6]



(b) consumers delay purchases, expecting lower prices later; AD falls further, so firms cut output and jobs; a downward spiral of falling prices and spending; the real value of debts rises, so borrowers cut spending and some default; firms' profits fall, so investment falls; interest rates cannot go much below zero, so monetary policy loses power

Exercise 3.2

3.2 The data show an economy where unemployment fell from 7% to 3% while inflation rose from 2% to 6%.

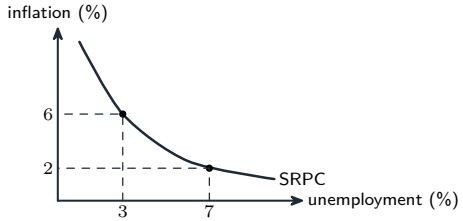


Using a Phillips curve diagram, explain the data and evaluate whether the lower unemployment can last. [8]

[[drawlines:9]]

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[[drawlines:9]]

3.2

award up to [8]: diagram: downward-sloping SRPC with the two points; rising AD lowered unemployment and raised inflation: a short-run trade-off; if 3% is below the natural rate, workers expect higher inflation and demand higher wages; the SRPC shifts up / out; unemployment returns to the natural rate with higher inflation: vertical LRPC; evaluation: if supply-side policies have lowered the natural rate, a low rate could last; Keynesians see more room for demand policy