5.3 Unemployment and inflation

Name: _____ Class: _____ Date: _____ **Total: 30 marks**

KEY WORDS unemployment rate • structural unemployment • cyclical unemployment • consumer price index • deflation • natural rate of unemployment

Objective

Build the skills to answer exam questions on **unemployment** and **inflation** : how they are measured, their types, causes and costs, and deflation.

You must be able to:

- calculate the unemployment rate and explain the limits of the figure
- explain structural, frictional, seasonal and cyclical unemployment, and their costs
- explain how a consumer price index (CPI) measures inflation, and the causes and costs of inflation and deflation
- construct a weighted price index
- explain the short-run and long-run Phillips curves

1 Key knowledge and worked examples

■ Unemployment and inflation

Unemployment rate $= \dfrac{\text{number unemployed}}{\text{labour force}} \times 100$. The **labour force** is people in work plus those actively looking for work. The rate may hide **underemployment** (part-time workers wanting full-time), **hidden unemployment** (people who gave up looking), and the informal economy.

exercises.lol exercises.com.cn

type	cause	example	policy
structural	skills or location no longer match the jobs	coal miners after mines close	training, relocation help
frictional	short gaps between jobs	a graduate searching	better job information
seasonal	demand changes with the seasons	ski instructors in summer	hard to remove
cyclical (demand-deficient)	low AD in a recession	factory layoffs in 2009	demand-side policies

Costs of unemployment: lost output (inside the PPC), lower tax revenue and higher benefit spending, lost incomes, poverty, skills loss, health problems, crime, social tension.

Inflation is a sustained rise in the general price level, measured by the **consumer price index (CPI)**: the cost of a fixed **basket** of goods, weighted by the share of spending. **Deflation** is a sustained fall. **Disinflation** is a fall in the rate of inflation.

Causes: demand-pull (AD grows faster than capacity) and **cost-push** (SRAS falls: higher wages, oil prices).

Costs of high inflation: loss of purchasing power for those on fixed incomes, uncertainty that cuts investment, less competitive exports, redistribution from savers to borrowers, menu and shoe-leather costs. **Costs of deflation:** consumers delay purchases, real debt burdens rise, firms cut output and jobs: a downward spiral. Many central banks target about 2% inflation.

AHL – weighted index: index = $\sum$(weight $\times$ price index of item); inflation = index change in %.

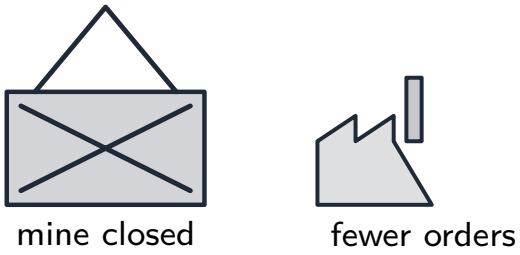
AHL – Phillips curve: in the **short run** there is a trade-off: lower unemployment comes with higher inflation. In the **long run** (monetarist view) the curve is **vertical** at the **natural rate of unemployment** (structural + frictional + seasonal): trying to push unemployment below it only raises inflation.

Answer shapes: identify the type or cause, explain it with the data, and match it to a policy.

exercises.lol exercises.com.cn

2 Practice

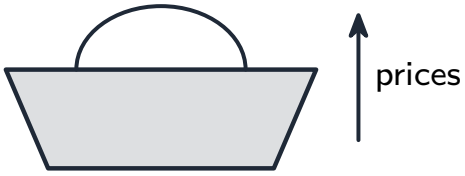
2.1 Distinguish between structural and cyclical unemployment. [2]



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

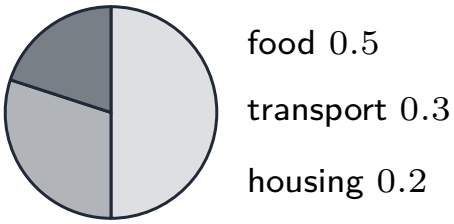


2.3 Explain **two** costs of high inflation for an economy. [4]

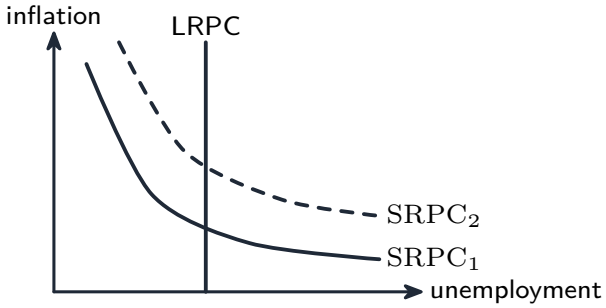


exercises.lol exercises.com.cn

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]



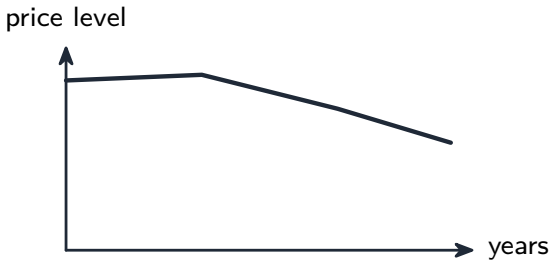
2.5 Explain why the long-run Phillips curve is vertical according to monetarist economists. [3]



exercises.lol exercises.com.cn

3 Exam-style questions

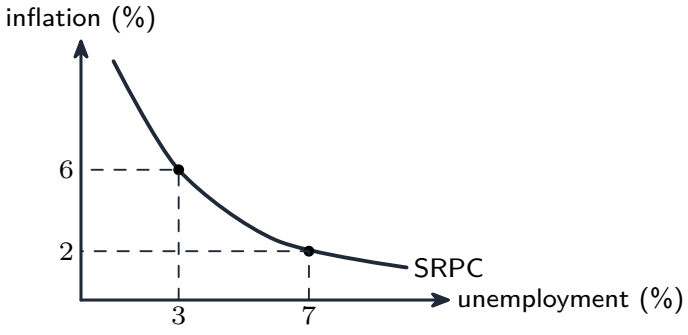
3.1 In one country, prices fell for two years in a row.



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

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

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]]

exercises.lol exercises.com.cn

Solutions

Marking: **M1** a correct method, **A1** the correct answer, **B1** an independent mark.

Each answer shows the steps, then the **result**.

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

2.2

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

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

2.4

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

2.5

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

3.1

(a) a sustained fall in the general price level

(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

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

exercises.lol exercises.com.cn