

Exercise walk-through

2.4

Price Indices and Inflation

AP Macroeconomics

Who inflation hurts

A fixed nominal loan: fictional example

A lender expects \$1,050 repayment next year. Expected price index: 102; actual index: 110 (today = 100).

$$\text{Expected purchasing power} = \frac{1050}{102} \times 100 \approx \$1029$$

$$\text{Actual purchasing power} = \frac{1050}{110} \times 100 \approx \$955$$

The lender receives less purchasing power than expected; the borrower benefits from the lower real burden.

Surprise inflation reduces the real burden of fixed nominal repayments.

Which inflation costs remain?

Compare three contracts and decisions

Fixed nominal pension

Prices rise faster than payments: purchasing power falls.

Inflation-indexed pension

Payments adjust with the index; the same loss need not occur.

Shop updates its price lists

Menu costs remain even when inflation is expected.

Anticipated inflation can be built into contracts. Cash-management costs may remain; unexpected deflation benefits fixed-rate lenders at borrowers' expense.

Exercises 2.1-2.3

2.1 Define inflation.

[1]

2.2 A basket costs \$250 now and \$200 in the base year. Find the CPI.

[2]

2.3 The CPI rises from 120 to 126. Find the inflation rate.

[2]

Exercises 2.1-2.3

2.1 Define inflation.

[1]

2.1

- a sustained rise in the general price level

2.2 A basket costs \$250 now and \$200 in the base year. Find the CPI.

[2]

2.2

- $\text{CPI} = \frac{250}{200} \times 100 = 125$

2.3 The CPI rises from 120 to 126. Find the inflation rate.

[2]

2.3

- $\frac{126 - 120}{120} \times 100 = 5\%$

Exercises 3.1-3.2

3.1 The CPI is based on

[1]

☐

A every good in the economy

B a fixed basket of goods

C food only

D exports

3.2 Disinflation means that

[1]

☐

A prices are falling

B inflation is slowing but still positive

C prices are rising very fast

D there is no inflation at all

Exercises 3.1-3.2

3.1 The CPI is based on

[1]

- ☐ **A** every good in the economy
B a fixed basket of goods
C food only
D exports

3.1 B

- a fixed basket of goods.

3.2 Disinflation means that

[1]

- ☐ **A** prices are falling
B inflation is slowing but still positive
C prices are rising very fast
D there is no inflation at all

3.2 B

- inflation is slowing but still positive.

Exercise 3.3 (a)

3.3 A basket cost \$400 in 2020 (the base year) and \$460 in 2024.

(a) Find the 2024 CPI.

[2]

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3.3 A basket cost \$400 in 2020 (the base year) and \$460 in 2024.

(a) Find the 2024 CPI.

[2]

(a)

- $$\text{CPI} = \frac{460}{400} \times 100 = 115$$

Exercise 3.3 (b)

3.3 A basket cost \$400 in 2020 (the base year) and \$460 in 2024.

(b) State the total percentage rise in prices.

[1]

Exercise 3.3 (b)

3.3 A basket cost \$400 in 2020 (the base year) and \$460 in 2024.

(b) State the total percentage rise in prices.

[1]

(b)

- 15%