

Inflation Indices

What does CPI stand for?

What does RPI stand for?

Describe in your own words what these indices measure.

.....

Which of the indices forms the basis for the government's inflation target? Tick a box.

 CPI

 RPI

What is the government's inflation target?% per annum

Which of the indices is used to calculate pension and benefit increases. Tick a box.

 CPI

 RPI

List below some of the differences between the categories of goods and services that are included in the calculations of the CPI and RPI.

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List below some types of household that are excluded from the RPI.

.....

3 of the 12 main divisions in the Classification of Individual Consumption by Purpose (COICOP) are given in the table below. Complete this list.

Food & non-alcoholic beverages	Alcohol & tobacco	Clothing & footwear

How are changes in spending patterns allowed for when calculating the CPI and RPI?

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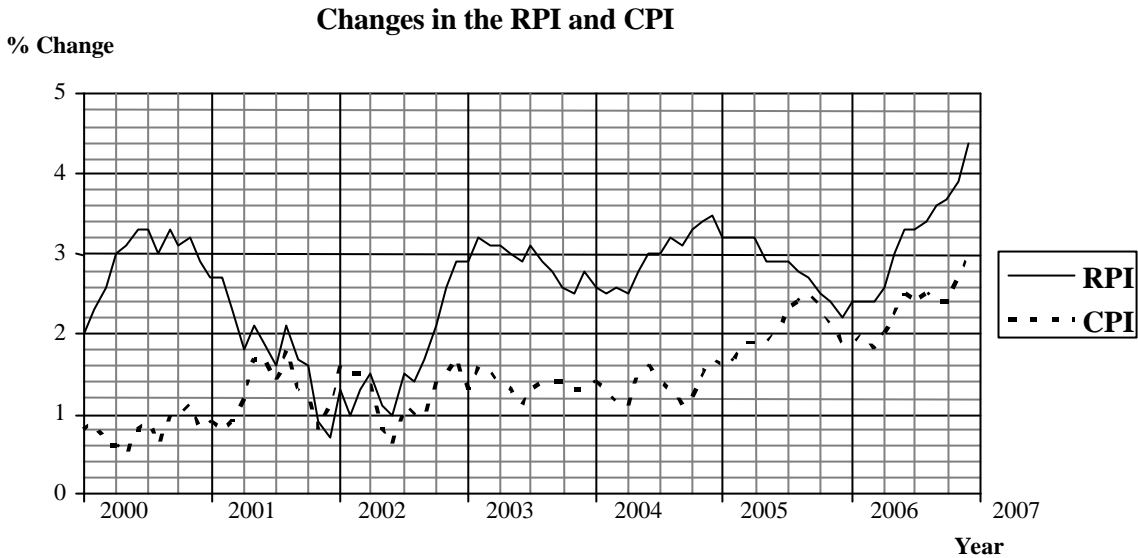
The CPI for tobacco was 105.9 in one month and 110.6 six months later. What was the % change in the price of tobacco over this period?

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In 1990 the RPI was 126.1 and in 2006 the RPI was 198.1.
 What amount of money in 2006 was of equivalent worth to
 £500 in 1990?

The graph below shows % changes in the RPI and CPI between 2000 and 2007.



Use the graph to complete the following table, giving both the year and quarter:

	Maximum	occurred in	Minimum	occurred in
CPI	%		%	
RPI	%		%	

Which of the indices is more variable.

Tick a box.

CPI

RPI

Suggest a reason why

List below which of the 12 main divisions in the Classification of Individual Consumption by Purpose (COICOP) prices rose by more than 2% last year.

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Did prices fall in any of the main divisions?

If so, list below the divisions and the % falls.

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Choose any 2 of the 12 COICOP divisions and for your choice:

- find the % change in prices for each year since 2000
- draw a graph to illustrate the data and comment on what it shows.



Teacher Notes

Unit Advanced Level, Mathematical Principles for Personal Finance

Notes on Activity

It is intended that students use documents about consumer prices indices to complete pages 1 – 2 and then keep these pages for revision later. You could ask learners to search the internet for the information they need or you could tell them where to find it or even provide the relevant documents. These can be found on the National Statistics website at www.statistics.gov.uk. Select **Inflation** from the **Key Statistics** menu. This gives recent information about the CPI and RPI and a list of links to many documents containing further information. The most useful of these for this activity are:

- **Consumer Price Indices First Release**
This gives a summary of annual changes for the previous month as well as a range of tables and charts that give monthly data for the last few years.
- **Focus on Consumer Price Indices**
This contains tables of latest figures, average retail prices, CPI data back to 1996 and RPI data back to 1987 as well as a lot of other data. There are useful charts and helpful guides on Consumer Price Indices with links to other information held on the National Statistics website

Note that **The Consumer Price Indices Technical Manual** covers the concepts underpinning the indices, differences between CPI and RPI, the methodologies used, collection and validation of prices, calculation of weights, and publication and usage of the different indices. Although very useful, this is very detailed and difficult at times and therefore more suitable for use later in the course.

Answers

CPI – Consumer Prices Index

RPI – Retail Prices Index

Both indices can be thought of as measuring the monthly cost of a very large shopping basket of goods and services that are bought by consumers in the UK.

The **CPI** forms the basis of the government's inflation target. The target is **2%** per annum

The **RPI** is used in the calculation of pension and benefit increases.

Differences between the categories of goods & services included in the CPI and RPI:

The **RPI** includes housing costs such as council tax, mortgage interest payments, house depreciation and building insurance whereas the **CPI** doesn't. The **CPI** includes university accommodation fees, foreign students' tuition fees, unit trusts and stockbrokers' charges whereas the **RPI** doesn't.

Types of households excluded from the RPI:

Students, people on very high incomes and pensioner households mainly dependent on state benefits.

Main COICOP divisions :

Food & non-alcoholic beverages	Alcohol & tobacco	Clothing & footwear
Housing & household services	Furniture & household goods	Health
Transport	Communication	Recreation & culture
Education	Restaurants & hotels	Miscellaneous goods & services

Changes in spending patterns are allowed for by revising annually the types and amounts of different goods and services used to calculate the indices.

$$\% \text{ change in price of tobacco} = \frac{110.6 - 105.9}{105.9} \times 100 = 4.4\%$$

$$2006 \text{ equivalent of } \pounds 500 \text{ in } 1990 \text{ is } \frac{198.1}{126.1} \times \pounds 500 = \pounds 785 \text{ (to the nearest } \pounds \text{)}$$

	Maximum	occurred in	Minimum	occurred in
CPI	2.9%	4 th quarter of 2006	0.6%	2 nd quarter of 2000
RPI	4.4%	4 th quarter of 2006	0.7%	4 th quarter of 2001

The **RPI** is more variable – it includes mortgages.

The rest of the answers will depend on when this activity is used – please consult the latest information on www.statistics.gov.uk.

