

## Ch. 5

9. Prices today are higher than prices in 1940 due to inflation. To know whether consumers today are worse off than consumers in 1940 or not, we will have to check whether the income of consumers have risen faster or slower than the prices. If the income has risen slower than consumers are worse off.

12. The classical view of unemployment perceives that the market system can work efficiently to solve the unemployment problem. When the demand for workers has fallen, there will be excess supply of labour at first, causing unemployment. Wages of workers will eventually fall, as workers are willing to accept lower wages to get back to work. This will reduce the unemployment until there's no unemployment anymore.

The Keynesian view perceives the labour market to be working imperfectly. When there's unemployment, the workers still don't want to reduce their wages. This will sustain unemployment, particularly in the short-run. Unless the government comes in to generate more jobs, the workers will not be hired back.

## Chapter 6

① - Using the expenditure approach

$$= C + I + G + X - M$$

$$= 5000 + 1000 + 1000 + (500 - 700)$$

$$= 6800$$

- Using the income approach

$$= \text{Compensation of employees} + \text{profit} + \text{depreciation}$$

$$= 5300 + 900 + 600$$

$$= 6800$$

⑥ Real Growth from 2010 - 2011 =  $13,792 - 13,406 = 386$  billions

$$\% \text{ Real Growth}_{2010-2011} = \frac{13,792 - 13,406}{13,406} \times 100 = 2.88\%$$

$$\text{Per Capita Real GDP}_{2010} = \frac{13,406}{310.2} = 43,217.28$$

$$\text{Per Capita Real GDP}_{2011} = \frac{13,792}{313.2} = 44,035.76$$

$$\text{Growth in Per Capita Real GDP}_{2010-2011} = \frac{44,035.76 - 43,217.28}{43,217.28} \times 100$$

$$= 1.89\%$$

17a

Product	2009		2010		2011		Nominal Value of Final Product in 2011
	Quantity	Price	Quantity	Price	Quantity	Price	
Oranges (1/2 as final product)	90	0.9	100	1	100	1.25	125
Bicycles	20	85	25	90	30	95	2850
Magazines	175	3.5	150	3.5	150	3.25	487.5
Paper (2/3 as final product)	450	0.6	400	0.5	420	0.5	210
Orange juice	40	3.5	50	4	60	4.5	270
Hats	70	10	80	12.5	100	15	1500
<b>Nominal GDP 2011 = 5442.5</b>							

Sum nominal value of final product

17b

Using 2009 as base year

Product	2009			2010			2011		
	Quantity	Price (2009)	Real Value of Final Product	Quantity	Price (2009)	Real Value of Final Product	Quantity	Price (2009)	Real Value of Final Product
Oranges (1/2 as final product)	90	0.9	81	100	0.9	90	100	0.9	90
Bicycles	20	85	1700	25	85	2125	30	85	2550
Magazines	175	3.5	612.5	150	3.5	525	150	3.5	525
Paper (2/3 as final product)	450	0.6	270	400	0.6	240	420	0.6	252
Orange juice	40	3.5	140	50	3.5	175	60	3.5	210
Hats	70	10	700	80	10	800	100	10	1000
Real GDP 2009 = 3503.5			Real GDP 2010 = 3955			Real GDP 2011 = 4627			

Real GDP Growth 2009-2010 =  $((3955-3503.5)/3503.5)*100 = 12.9\%$

Real GDP Growth 2010-2011 =  $((4627-3955)/3955)*100 = 17\%$

Sum real value of final product

17C

**Using 2010 as base year**

Product	2009			2010			2011		
	Quantity	Price (2010)	Real Value of Final Product	Quantity	Price (2010)	Real Value of Final Product	Quantity	Price (2010)	Real Value of Final Product
Oranges (1/2 as final product)	90	1	90	100	1	100	100	1	100
Bicycles	20	90	1800	25	90	2250	30	90	2700
Magazines	175	3.5	612.5	150	3.5	525	150	3.5	525
Paper (2/3 as final product)	450	0.5	225	400	0.5	200	420	0.5	210
Orange juice	40	4	160	50	4	200	60	4	240
Hats	70	12.5	875	80	12.5	1000	100	12.5	1250
	Real GDP 2009 = 3762.5			Real GDP 2010 = 4275			Real GDP 2011 = 5025		

Real GDP Growth 2009-2010 =  $((4275-3762.5)/3762.5)*100 = 13.6\%$

Real GDP Growth 2010-2011 =  $((5025-4275)/4275)*100 = 17.5\%$



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Good	Quantity Consumed	2008 Prices	Value for 2008 Price	2009 Prices	Value for 2009 Price	2010 Prices	Value for 2010 Price
X	100	1.00	100	1.50	150	1.75	175
Y	150	1.50	225	2.00	300	2.00	300
Z	25	3.00	75	3.25	81.25	3.00	75

Total value for 2008 price = 400

Total value for 2009 price = 531.25

Total value for 2010 price = 550

Price Index 2008 =  $(400/400)*100 = 100$

Price Index 2009 =  $(531.25/400)*100 = 132.8$

Price Index 2010 =  $(550/400)*100 = 137.5$

Percentage change in Price Index between 2008-2009 =  $(132.8-100)/100 = 32.8\%$

Percentage change in Price Index between 2009-2010 =  $(137.5-132.8)/132.8 = 3.5\%$

Yes, there was  
inflation between  
2009-2010

- 14.
- a. real interest rate =  $-3\%$
  - b. real interest rate =  $4\%$
  - c. real interest rate =  $6\%$
  - d. real interest rate =  $6\%$

The borrower would be best-off in situation a  
(where he/she effectively pays back less than the borrowed amount)

The lender would be best-off in situation c & d.  
(where he/she gains most interests)